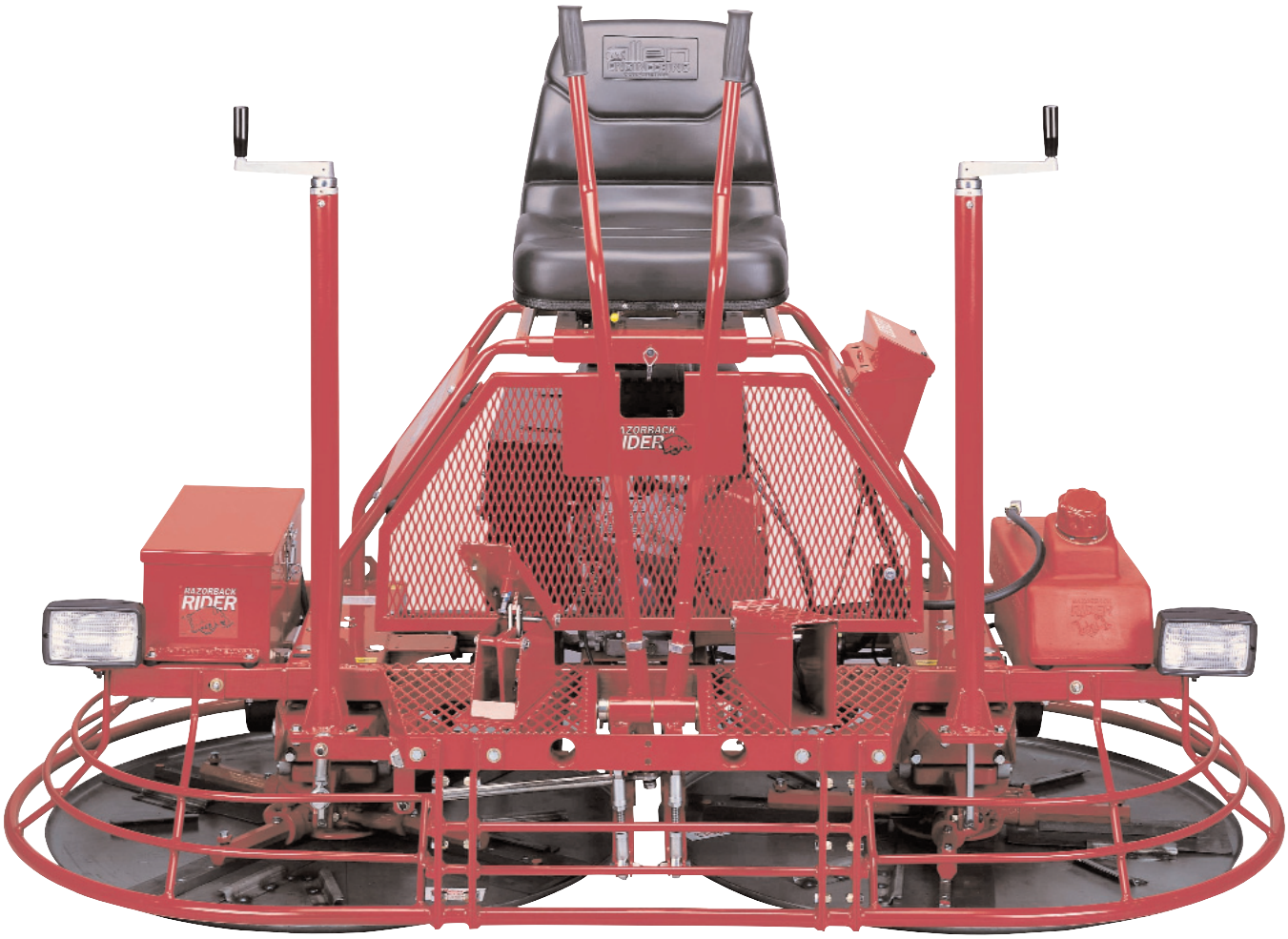
RAZORBACK® RIDERS



PRO900
PROFESSIONAL SERIES

Version 2

allen ENGINEERING CORPORATION®

Riding Trowel

OPERATIONS MANUAL
PARTS BOOK

Printed 5/02

THIS MANUAL COVERS RIDING TROWEL(S) BELOW

MODEL

900 NOL SFC 20LM	**# 032024**
900 NOL SFC 25KO W/O SPRAY	**# 034511**
900 NOL SFC 20HO W/O SPRAY	**# 039053**
900 NOL SFC 22KA	**# 039202**
900 NOL SFC 22KA EDGER	**# 041270**

Allen Engineering's Razorback Riding Trowels are covered under one or more of the following patent numbers: **U.S. Design Patents:** 323,510; 340,340; 344,736; 400,542; 402,998; 402,999; 403,332; 410,931. **U.S. Utility Patents:** 5,108,220; 5,238,323; 5,480,257; 5,480,258; 5,613,801; 5,685,667; 5,803,658; 5,816,739; 5,890,833; 5,934,823; 5,967,696; 5,988,938; 6,048,130; 6,053,660; 6,089,786. **Canadian Patents:** 2,039,893. **French Patents:** 0293496. **German Patents:** M9007736.9 With other Patents Pending.

1A OPERATIONS

OPERATIONS
IDENTIFICATION PLATE

An identification plate listing the Model Number and Serial Number is attached to each unit and is located on the left side of the mainframe. The plate should not be removed.

Please record the information found on this plate below so it will be available should the identification plate become lost or damaged . When ordering parts or requesting service information you will always be asked to specify the model number and serial number of the unit.

Model Number

PRO 900-NOL-SFC 20KA

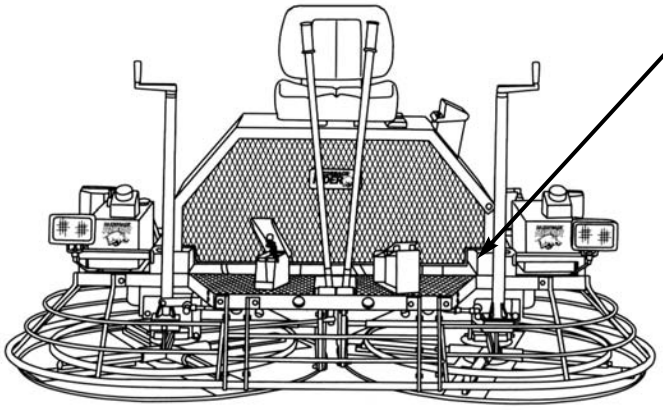
- **PRO SERIES** — PRO 900
- **ROTOR SIZE** — 900 mm
- **NON-OVERLAPPING BLADES**
- **GEAR BOX** — STANDARD FAN COOLED
- **ENGINE** — 20 HP KAWASAKI, 20 HP LINAMAR, 20 HP HONDA, 25 HP KOHLER

Serial Number

The serial number found on the identification plate is a ten digit number. The model number identifies your machine and will ensure that you receive the correct replacement parts.

900 0899 001

- **Series**
- **Month**
- **Year**
- **Production Sequence**



FILL IN FOR FUTURE REFERENCES

Model Number:_____

Serial Number:_____

Date Purchased:_____

Purchased From:_____

_____

PRO 900-NOL-SFC Operating Information
TABLE OF CONTENTS

1A OPERATIONS

1.1 Safety Note 1A-6
1.2 Laws Pertaining to Spark Arrestors 1A-6
1.3 Operating Safety 1A-7
1.4 Service Safety 1A-8
1.5 Dimensions 1A-8
1.6 Technical Data 1A-9
1.7 Description 1A-10
1.8 Before Starting 1A-10
1.9 Starting 1A-10
1.10 Operating 1A-11
1.11 Stopping 1A-11
1.12 Steering 1A-12
1.13 Pitch Adjustment 1A-12
1.14 Periodic Maintenance Schedule 1A-13
1.15 Trowel Gearbox 1A-13
1.16 Drive Belts 1A-14
1.17 Control Linkage Lubrication 1A-14
1.18 Control Linkage Adjustment (Forward and Reverse) 1A-15
1.19 Right Hand Control Lever Adjustment (Right or Left) 1A-15
1.20 Lift Lever Adjustment 1A-16
1.21 Transporting Trowels 1A-17
1.22 Battery Jump Start Procedures 1A-18

This machine is built with user safety in mind. However, it can present hazards if improperly operated and serviced. Follow operating instructions carefully!

If you have any questions about operating or servicing this equipment please contact your Allen Engineering Distributor or Allen Engineering Corp. Customer Service at 800-643-0095 or 870-236-7751.

Important Reminder

Complete any warranty requirements as specified by the engine manufacturer in their instructions found inside the battery box.

Your engine and clutch is not manufactured by Allen Engineering Corp., and therefore is not covered under Allen Engineering warranty.

Your engine manufacturer should be contacted if you wish to purchase a parts manual or a repair manual for your engine.

Refer to enclosed owners engine manual for complete O&M instructions. See your battery manufacturer for battery warranty.

Your Distributor

Your Distributor has Allen Engineering trained mechanics and original Allen Engineering replacement parts. Always contact the Allen Engineering Distributor who sold you this machine for Allen Engineering Certified repairs and replacement parts.

Place distributor information here for future reference.

DISTRIBUTOR NAME:_____ PHONE NUMBER:_____
ADDRESS:_____
CITY:_____ STATE:_____ ZIP:_____

SALESMAN:_____

ADDITIONAL INFORMATION: _____
_____
_____
_____
_____
_____
_____
_____

Information Contained in This Manual

This manual provides information and procedures to safely operate and maintain the Allen Engineering PRO 900-NOL-SFC Model ***Razorback® Riding Trowels***.

For your own safety and protection from personal injury carefully read, understand and observe the safety instructions described in this manual.

Always operate and maintain this machine in accordance with the instructions described in this manual. A well maintained piece of equipment will provide many years of trouble free operation. This manual is divided into the sections listed below.

1A OPERATIONS	2A PARTS

Ordering Parts

This manual contains an illustrated parts list for help in ordering replacement parts for your machine. Follow the instructions listed below when ordering parts to ensure prompt and accurate delivery. All orders for parts must be made through your local authorized Allen Engineering dealer. All authorized Allen Engineering dealers must fax a copy of the parts order to customer service. The fax number is (870) 236-3934. Facsimile orders must contain the following information:

1. On all orders for service parts include SERIAL NUMBER and MODEL number.

2. Shipment may be delayed if this information is not included.

3. Include correct description and part number from part section 2A.

4. **State exact shipping instructions including preferred routing and complete destination address. Also please indicate your preferred freight carrier. If no freight carrier is indicated Allen Engineering reserves the right to ship the shipment the best way possible. Once a shipment leaves Allen Engineering's docks it becomes the responsibility of the freight carrier to insure that it arrives at it's intended destination.**

5. **DO NOT** return parts to Allen Engineering without receiving written authorized Returned Goods Authorization (RGA) from Allen Engineering. All authorized returns must bee shipped prepaid. **All unauthorized returns will be shipped back to the addressee at their expense.**

Keep this manual or a copy of it with the machine. If you loose this manual or need an additional copy please contact your Allen distributor or Allen Engineering Corporation at (800) 643-0095 and order literature part number 038958.

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1A OPERATIONS

1.1 Safety Notes

This manual contains NOTES, CAUTIONS and WARNINGS which must be followed to reduce the possibility of improper service damage to the equipment or personal injury. Read and follow all NOTES, CAUTIONS and WARNINGS included in this manual.

NOTE Contains additional information important to a procedure.

CAUTION Provides information important to prevent errors which could damage machine or components.

WARNING Warns of conditions or practices which could lead to personal injury or death.

1.2 Laws Pertaining to Spark Arrestors

Notice: Some states require that in certain locations arrestors be used on internal combustion engines. A spark arrester is a device designed to prevent the discharge of spark or flames from the engine exhaust. It is often required when operating equipment on forested land to prevent the risk of fires. Consult the engine distributor or local authorities and make sure that you comply with regulations regarding spark arrestors.

1.3 Operating Safety

Familiarity and proper training are required for the safe operation of this equipment! Equipment operated improperly or by untrained personnel can be dangerous! Read the operating instructions contained in both this manual and the engine manual and familiarize yourself with the location and proper use of all controls.

Safety Precautions

1. Read operating and safety instructions before using the Riding Trowel. Operate the machine in accordance with the manufacturer's instructions.

2. Inspect your Riding Trowel for damage or tampering that can sometimes occur during shipping.

3. **If damage is found file a claim with your carrier immediately! Mark freight bill of lading as damaged shipment.**

4. Do not operate Riding Trowel if any guards have been removed or if the "safety switch" is not operational.

5. Only trained personnel should be allowed to operate your Riding Trowel.

6. Never allow more than one person on the Riding Trowel while it is in operation.

7. No foreign objects such as buckets, tools or materials should ever be attached or allowed to ride on the Trowel during operation.

8. Do not attempt to fill fuel tank or oil sump while the engine is running. Allow engine to cool before refueling.

9. Never attempt to operate the Riding Trowel on steep inclined surfaces.

10. Do not use over the counter hardware to replace manufacturer's hardware.

11. **WARNING: When operating machines with gas engines in confined areas. The fumes <u>MUST</u> be ventilated!**

12. Always wear safety goggles, ear protection, and gloves when operating the Riding Trowel.

13. When operating Pro 900 Edger, never put hands on or near the edger rings. There are several <u>pinch point</u> decals loacted on the rings. Please adhere to the warnings to prevent serious injury.

1.4 Service Safety

Poorly maintained equipment can become a safety hazard! In order for the equipment to operate safely and properly over a long period of time, periodic maintenance and occasional repairs are necessary.

DO NOT attempt to clean or service machine while it is running. Rotating parts can cause severe injury.

DO NOT crank a flooded engine with the spark plug removed. Fuel trapped in the cylinder will squirt out the spark plug opening.

DO NOT test for spark if engine is flooded or the smell of gasoline is present . A stray spark could ignite the fumes.

DO NOT use gasoline or other types of fuels or flammable solvents to clean parts especially in enclosed areas. Fumes from fuels and solvents can become explosive and can be hazardous to your health.

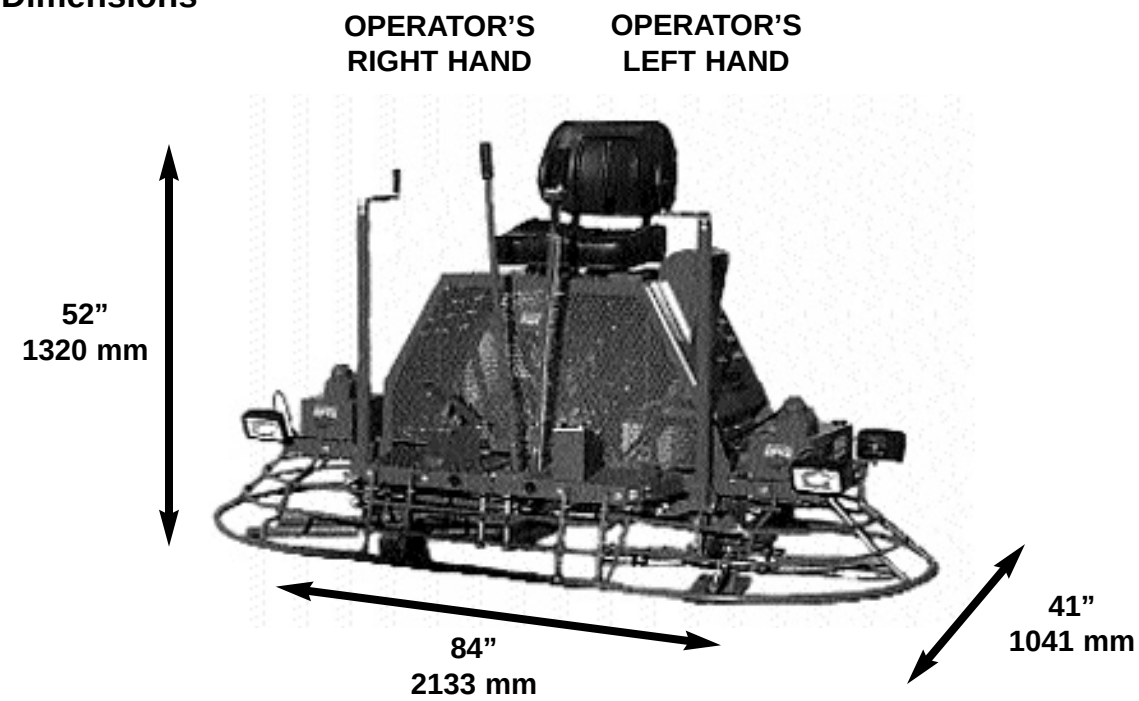
ALWAYS operate machine with all safety devices and guards in place and in working order.

ALWAYS keep area around muffler free of debris such as leaves, paper, cartons, etc. A hot muffler could ignite such items starting a fire.

ALWAYS replace worn or damaged components with spare parts designed and recommended by ALLEN ENGINEERING.

ALWAYS disconnect battery on machines before servicing to avoid accidental start-up.

1.5 Dimensions



1.6 Technical Data

Engine Make & Model		Kaw. 22HP	Koh. 25HP	Hon. 20HP	Lin. 20HP
Rated Power	HP (kW)	22(16.4)	25(18.6)	20(14.9)	20(14.9)
Piston Displacement	cu. in. (cc)	38 (624)	44(725)	37.5(614)	47.7(782)
Spark Plug	type	Champion RC12YC	Champion RC12YC	BPR6ES NGK	Champion RC12YC
Electrode Gap	in. (mm)	.025 (64)	.040(1.02)	.025(64)	.025(64)
Operating Speed	RPM	3600	3600	3600	3600
Battery	volts	12	12	12	12
Fuel Capacity	gal. (L)	4(15.14)	4(15.14)	4(15.14)	4(15.14)
Fuel Consumption	gal. (L) per hr	1.66 (6.27)	1.66(6.27)	1.66(6.27)	1.66(6.27)
Running Time	hrs	2.5	2.5	2.5	2.5
Centrifugal Clutch	type	Mechanical Ramp	Mechanical Ramp	Mechanical Ramp	Mechanical Ramp
Low Oil Shutdown Alert		Yes	No	Yes	Yes
Engine Oil Capacity	US qt. (L)	2 (1.9)	2(1.9)	1.3(1.2)	2.7(2.6)
Engine Lubrication	Oil Grade	SAE10W30 SG	SAE10W30 SG	SAE10W30 SG	SAE10W30 SG
Weight	lbs. (kg)	91 (41)	94(43)	90(40)	94(43)
Charging System	amp	20	20	20	35

Trowel Specifications

		Pro 900-NOL-SFC	Pro 900-NOL-SFC-EDGER
Length	in. (mm)	84 (2133)	88 (2235)
Width	in. (mm)	41 (1041)	40 (1016)
Operating Weight	lbs. (kg)	700 (318)	786 (357)
Detachable Guard Rings		Yes	No
Troweling Width	in. (mm)	70 (1778)	85 (216)
Troweling Area	sq. ft. m^2	17.5 (1.63)	17.5 (1.63)
Travel Speed	ft/min. (mm/min.)	230 (70)	230 (70)
Rotor Speed	RPM	115	125
Pitch Range	deg.	0 -20	0-20
Gearbox		Standard Fan Cooled (SFC)	Standard Fan Cooled (SFC)
Safety Switch	Foot Style	Yes	Yes
Gearbox Lubrication	25 oz.	Mobile Mobilith SCH 220	Mobil Mobilith SCH 220

Summary Data for CE Marking Sound & Vibration Testing							
Test Machine	**Engine Type**	**Avg. Sound Pressure Level (SPL)**	**Operator Ear SPL**	**Calculated Sound Power Level**	**Seat Vibration Overall**	**Foot Vibration Overall**	**Hand Vibration Maximum**
		dB(A)	**dB(A)**	**dB(A)**	**m/sec^2**	**m/sec^2**	**m/sec^2**
900 OL STD	Onan 20	95	95	110	1.3	0.6	1.3
900 NOL STD	Onan 20	95	93	111	0.4	0.4	1.3

This information was acquired from extensive sound and vibration analysis tests ran at Allen Engineering Corporation. The data above was acquired from May till June of 1996.

1A OPERATIONS

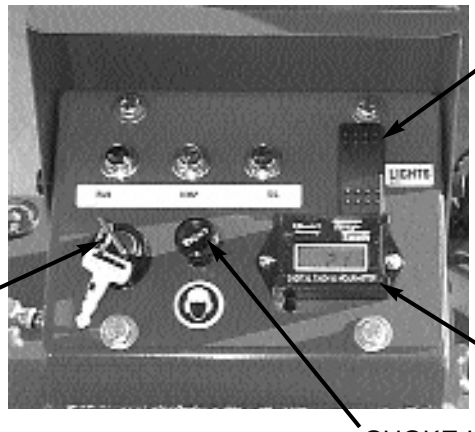
1.7 Description

The Riding Trowel is a modern high production machine. Finishing rate will vary depending on the operators skill and job conditions. The Riding Trowel has eight finishing blades. The Standard Fan Cooled Gearboxes are designed to provide exceptional performance with low maintenance and trouble free use under some of the most worse conditions. All Allen Engineering ***Razorback*®** ***Riders*** are equipped with a safety shutdown switch and a low oil shut down for added job safety and engine protection. Operating time between fuel refills is approximately 2-1/2 to 3 hours with a rotor speed up to 155 RPM for a PRO 900-NOL-SFC (*depending on model*). The ***Razorback*®** ***Riders*** are the most technically advanced trowels on the market today. With Proper maintenance and use your Riding Trowel will provide you with exceptional service.

1.8 Before Starting

Before starting trowel check the following:

* Oil level in engine:
* Oil level in trowel gearboxes:
* Fuel level :
* Condition of air filter:
* Condition of trowel arms and blades:
* Grease trowel daily:



1.9 Starting

Before starting trowel refer to drawing above for location and identification of controls.

1. Sit down correctly on the Riding Trowel Seat. DO NOT attempt to start the Riding Trowel with out an operator in the seat.

2. Place left foot on the safety switch pedal located on the operators left hand side. Press down gently engaging the safety switch and maintain slight pressure.

3. If engine is cold pull out the choke lever located on the control panel (refer to drawings above).

4. Press down on throttle pedal (located by the operator's right foot) one to two times. NOTE: To much throttle during start-up will flood the engine.

5. Turn key to the start-position. immediately release key when engine starts. If after two or three attempts the engine has not started push in choke. This will open the choke. Attempt to start trowel again. Allow engine to warm up before operating trowel.

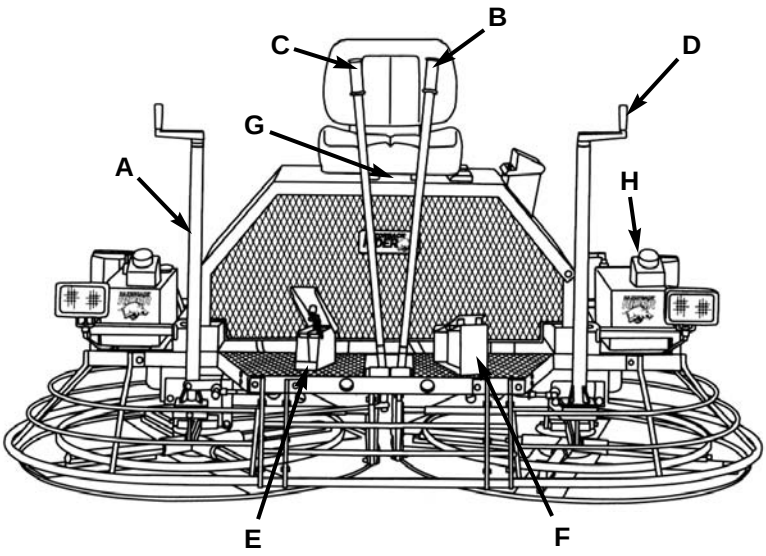
Caution: Operating the starter for more than 5 seconds can damage the starter or engine. If engine fails to start release the switch and wait 10 seconds before operating starter again.

1.10 Operating

To utilize your Allen Engineering ***Razorback***® ***Rider*** to its fullest capacity the machine should be driven in the direction the operator is facing. This will finish the widest possible area while giving the operator an excellent view of the slab surface about to be troweled. When the machine reaches the end of the slab make a 180 degree turn and repeat the straight line of direction to the other end of the slab. To familiarize a new operator with the Riding Trowel the following steps should be taken.

1. Point out the location of all Controls

   A. right pitch control
   B. control lever (forward reverse)
   C. control lever (left & right, forward & reverse
   D. left pitch control
   E. right foot pedal (throttle control)
   F. left foot pedal (safety switch)
   G. seat adjustment
   H. fuel gauge



2. With the operator in the seat, show him the functions of the control levers (B) and (C) and how to start the machine. (refer to page 1A-10)

A hard level concrete slab with water on the surface is an idea place for an operator to practice with the machine. For practice pitch the blades up approximately 1/4" on the leading edge. Start by making the machine hover in one spot and then practice driving the machine in a straight line and making 180 degree turns. Best control is achieved at full RPM.

CAUTION: After starting engine fully engage the throttle. This allows the engine to warm up quicker and also engages the centrifugal clutch to max. RPM'S. NOTE: If you start out at a low RPM this will partially engage the clutch, causing it to slip. This will severely damage the clutch, causing clutch failure.

CAUTION: DO NOT use excessive pressure on the control levers. Excessive pressure does not increase the reaction time of the machine and can damage steering controls.

1.11 Stopping

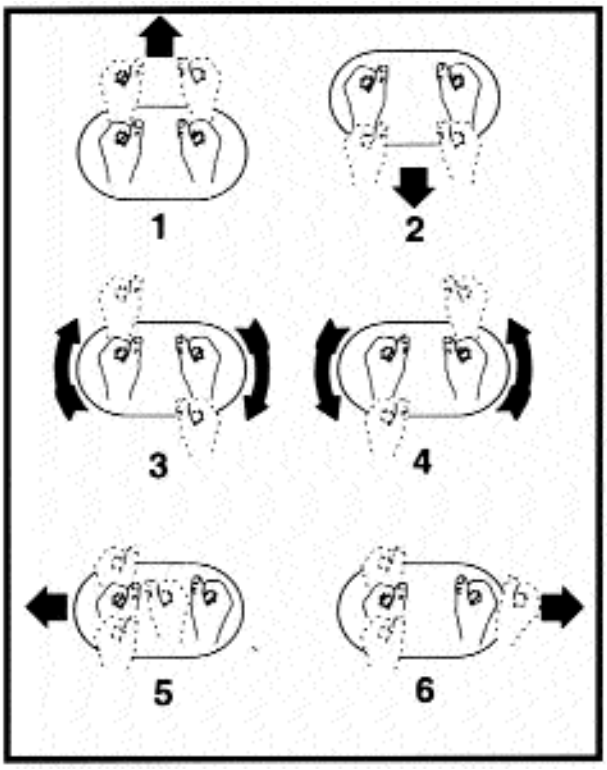
To stop the trowels movement, return the control levers (C) and (B) to their neutral position and release pressure on the right foot pedal (E) .

NOTE: On units equipped with an optional cruise control push lever all the way down this will release the right foot pedal and reduce engine speed to disengage the clutch. To stop engine turn the key to the off position.

1.12 Steering

A slight "feathering motion" forward and backward with the left hand control lever is required to move the machine in a straight path to the left or right while operating the right hand control lever. See illustration.

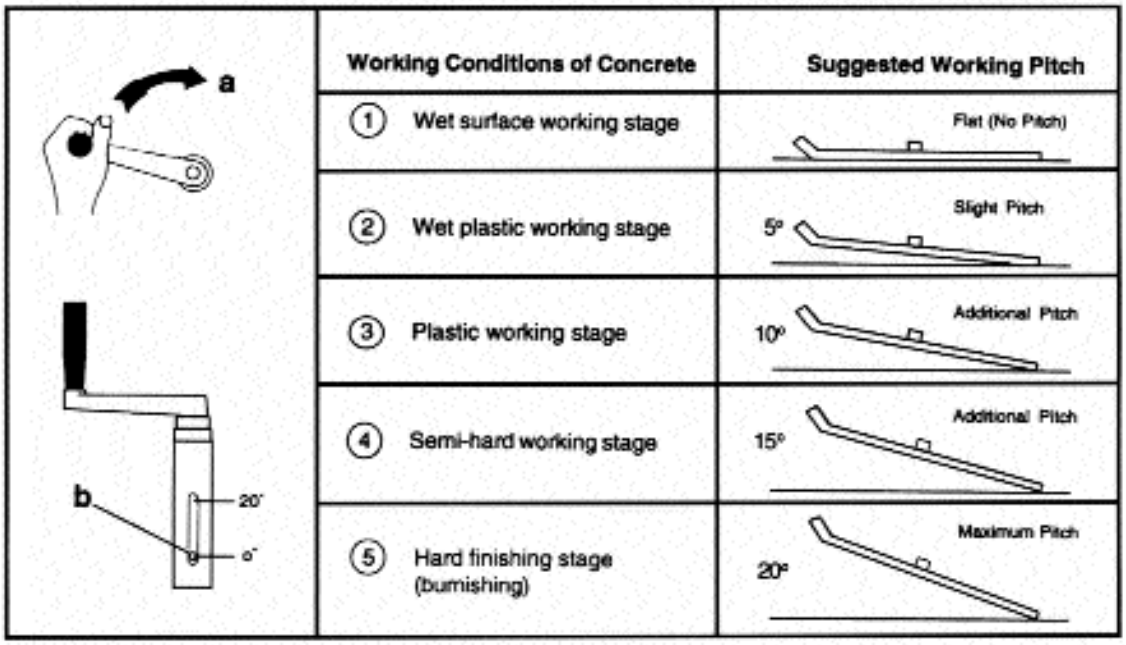
1 forward
2 reverse
3 rotate clockwise
4 rotate counter clockwise
5 left sideways
6 right sideways



1.13 Pitch Adjustment

Different pitch angles are needed as you work the different stages of the concrete. See the drawing below. When changing or setting pitch (angle of trowel blades), slow the machine down, set the desired degree of pitch on the left side of the machine and then adjust the right side to match.

To increase the pitch, turn the pitch control clockwise (a) use the pitch indicator (b) to adjust pitch equally on both right and left trowel blades.



1.14 Periodic Maintenance Schedule

The chart below list basic trowel and engine maintenance. Refer to engine manufacturer's Operation Manual for additional information on engine maintenance. A copy of the engine Operator's Manual was supplied with the machine when it was shipped. To Service the engine pull the seat locking pin out and tilt seat back.

	DAILY	EVERY 20 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY 300 HOURS
GREASE TROWEL ARMS	X				
CHECK OIL LEVEL IN G-BOX	X				
CHECK FUEL LEVEL	X				
INSPECT AIR FILTERS REPLACE AS NEEDED	X				
CHECK AND TIGHTEN EXTERNAL HARDWARE	X				
GREASE CONTROL LINKAGE		X			
CHECK DRIVE BELTS			X		
CHECK VALVE CLEARANCE			X		
CHANGE ENGINE OIL				X	
REPLACE OIL FILTERS				X	
OIL CROSSHEAD				X	
GREASE TROWEL G-BOX					X
REPLACE SPARK PLUG					X

1.15 Trowel Gearbox

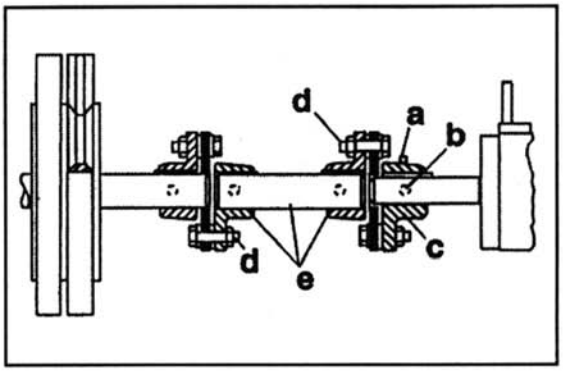
1. Check Oil levels in the gearbox daily (every 8 hours) Add oil if oil level is below the check sight glass. To add oil tilt trowel back and remove the side plug. Add Oil through hole opening. Replace plug after proper level has been achieved. DO NOT Fill past the plug. Use only Mobil Oil SHC 634, synthetic ISO VG 460.

2. Each Gearbox has a grease fitting on top cover that must be greased (2 SHOTS ONLY) every 300 operating hours. Use only Mobilith SHC 220. Extended pressure grease.

1.16 Drive Belts

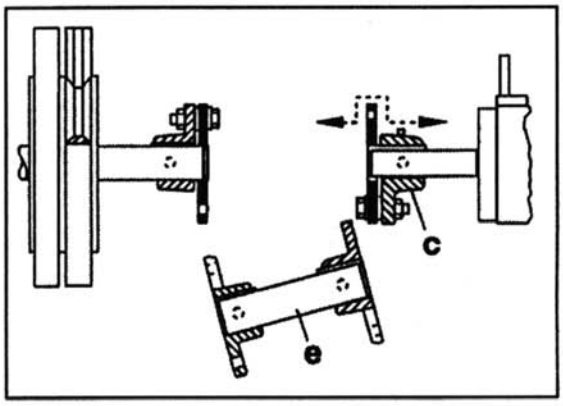
To Tighten Belts

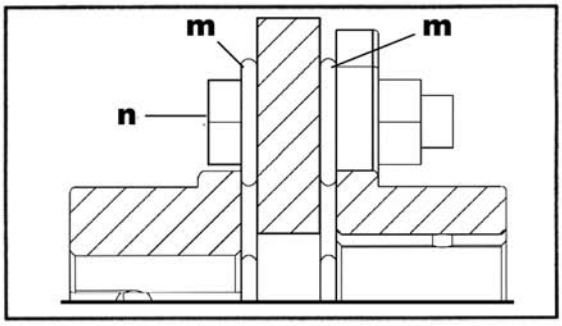
1. Loosen the four engine bolts.
2. Then locate the engine plate adjustment screws, on the back of the engine.
3. Next loosen the nylon locknuts and jamnuts.
4. Turn all nylon locknuts counterclockwise an equal number of turns to pull the engine backward until correct belt tension is attained. Maximum belt play should be from 1/2” to 3/4” (13mm to 19mm) at the center of the span. New belts sould be re-tensioned after the first 10 to 12 hours of operation.
5. Retighten all jam nuts and locknuts.

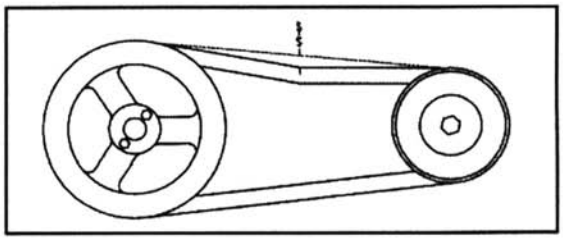


To Replace Belts

1. Remove Belt Guard.
2. Loosen the four engine mounting bolts.
3. Locate the two engine plate adjustment screws. These screws are located in the rear of the engine.
4. Loosen al the jamnuts and nylon locknuts on the engine plate adjustment screws.
5. Tighten the two jamnuts clockwise, this will push the engine forward and relieve the belt tension.
6. Loosen set screws (a) and (b) on the flex coupler assembly (c).
7. Remove six attaching bolts (d) on the inside of the flex coupler assembly (e) and slide the flex coupler mount (c) toward gearbox so as to allow the inside spider assembly (e) to be removed intact.
8. Remove and install belts through opening created by removal of (e).
9. Reverse procedure for assembly. Do not over tight en the bolts on the flex coupler assemblies. Tighten screws (n) so that washers (m) are compressed halfway into discs.







NOTE: Remember that new belts should be re-tensioned after the first 10 to 12 hours of use. Maximum belt play should be from 1/2” to 3/4” (13mm to 19mm) at the center of the span.

1.17 Control Linkage Lubrication

The control linkage is equipped with seven grease fitting to lubricate pivot points. Grease control linkage once a week or every 20 hours to prevent wear and ensure free movement and smooth response of control levers.

Use a general purpose grease and add one to two shots of grease to each fitting.

1.18 Control Lever Adjustment

Be sure that the trowel is on a level surface. The control levers should line up evenly. If levers appear out of adjustment they can be re-adjusted forward or backwards as follows:

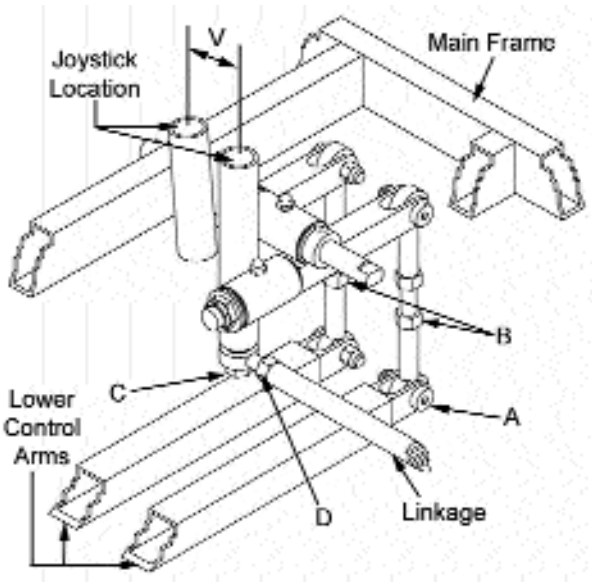
NOTE: Trowel must be placed on flat level surface that fully supports the blades on both rotors.

1. Remove bolts (A).
2. Loosen jam nuts (B).
3. Extend linkage to adjust control levers backward.
4. Shorten linkage to adjust linkage control levers forward.
5. After levers have been adjusted to the desired position,reassemble bolts (A) and tighten jam nuts (B).

1.19 Right Hand Control Lever Adjustment Right or Left

The right hand lever should be set to the same angle as that of the left to form a "V". If levers become out of adjustment adjust the right hand lever as follows:

1. Remove bolt (C).
2. Loosen jam nuts (D).
3. Extend linkage to move control levers to the right .
4. Shorten linkage to move control levers to the left.
5. After control lever has been adjusted to the desired position reassemble bolt (C). And tighten jam nuts (D).



1.20 Lift Lever Adjustment

Damage to or replacement of a trowel arm can change the adjustment of the lift lever. This can unbalance the trowel arms and cause the trowel to wobble during operation. To operate smoothly the lift lever on all arms must be adjusted the same to ensure that the trowel is balanced correctly. Adjust trowel arms using optional trowel arm jig as described below.

NOTE: Make sure that there is no pitch in the blades before attempting to remove a trowel arm.

1. Block up pressure plate (I) using wooden block (B).

2. Remove stabilizer ring from spider assembly (only on available models).

3. Remove blades from trowel arms.

4. Loosen hex head cap screw (A) and remove it and the external star washer from the spider boss.

5. Remove trowel arms from spider 4-boss with lift levers in place.

6. Clean flats on trowel arm before placing it in the trowel arm jig (PART# 016863).

7. For PRO 900 series trowels use the smallest spacer (1-¼ X 2-¼) (D).

8. Insert trowel arm into trowel arm jig as shown.

9. Tighten socket head bolts (E) down on the trowel arm to hold in place.

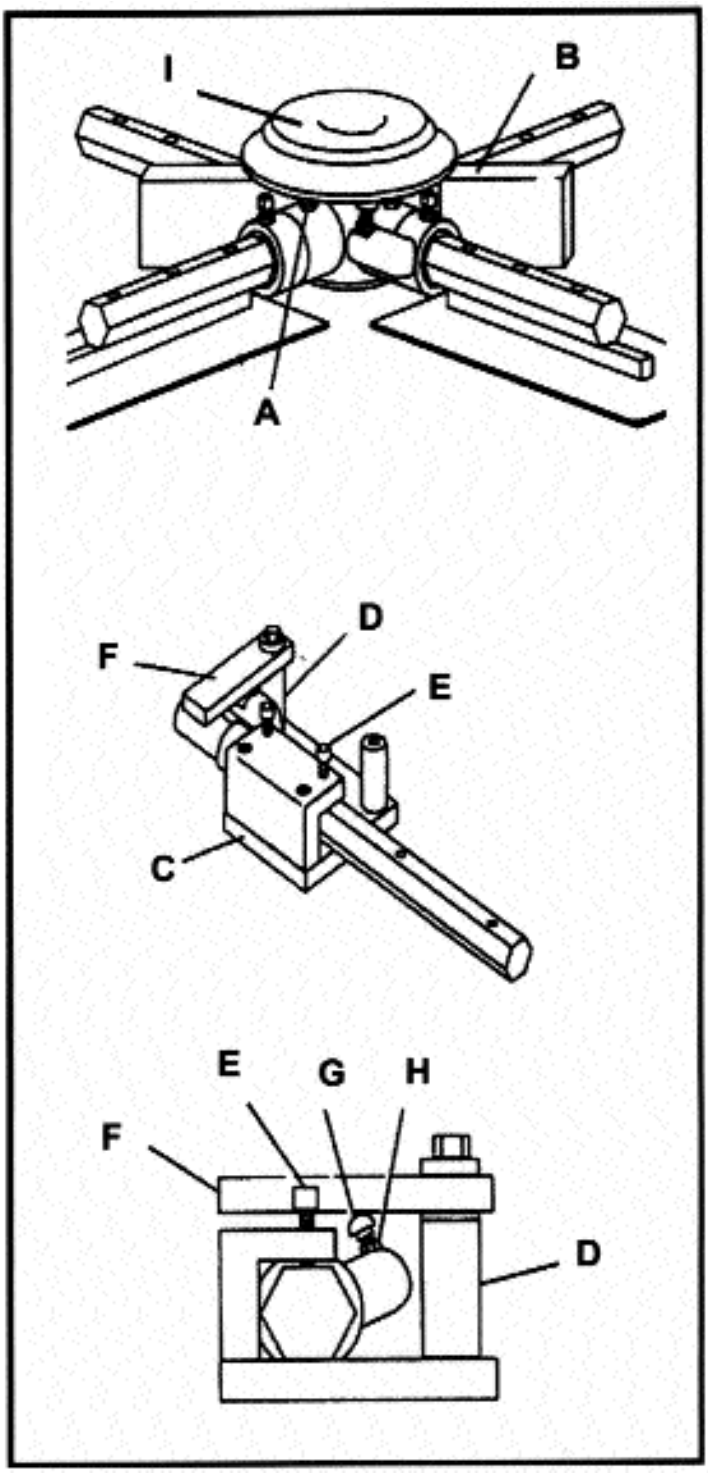
10. Place carriage bolts (G) on lift lever under the trowel arm jig (F) as shown.

11. Loosen jam nut (H) and adjust the carriage bolt so that the top of the bolt is just touching the bottom of the trowel arm jig and tighten jam nut (H).

12. Attach and trowel arm to spider boss and blades to arms.

13. Tighten down hex head cap screw to secure arm in place.

14. Reattach stabilizer ring (only on available models).



1.21 Transporting Trowel

Optional dolly jacks are available for short moves or to aid in servicing the trowel. Install dolly jacks as follows:

1. Inspect dolly jack for serviceability and damage.

2. Place riding trowel on firm level ground.

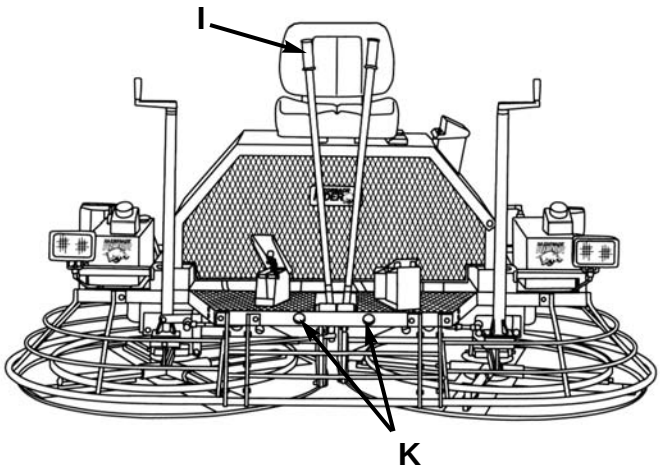
3. Tie steering levers (I) to frame to prevent them from tipping forward when trowel is being lifted.

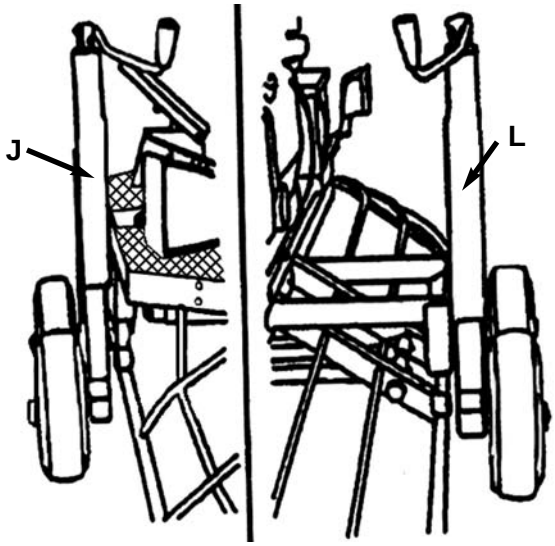
4. With the front dolly jack (J) Fully insert extension tube in the holes (K) in the mainframe of the riding trowel.

The front dolly jacks are equipped with short lifting tubes while the rear dolly jacks have long lifting tubes.

5. Insert the rear dolly jacks(L) with the long lifting tubes into the holes provided in the rear of the mainframe. The holes in the mainframe are located directly opposite the front holes.

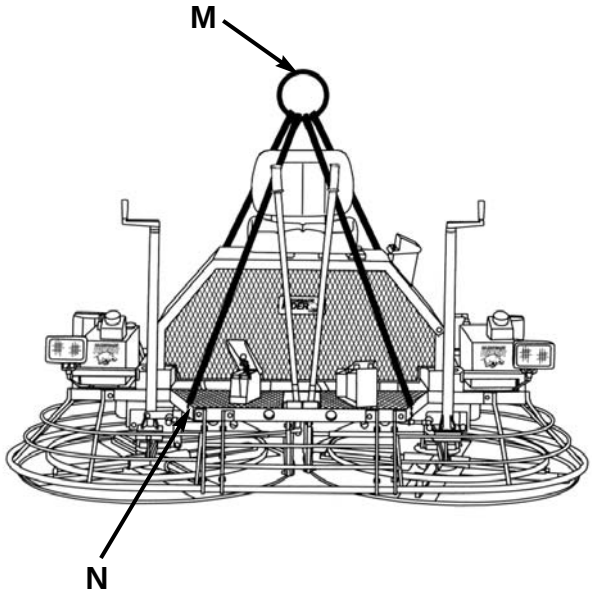
6. Turn jack handles clockwise to lift trowels and counter-clockwise to lower trowel.





CAUTION:

The dolly jack lifting system is designed for short moves and to aid in servicing the trowel. It is not a substitute for a towing system or trailer. An optional lifting bridle (M) is available and recommended for lifting the trowel. Attach the bridle to each of the four lifting eyes (N) on the trowel.



1.22 Battery Jump Start Procedure

Occasionally it may be necessary to jump start a weak battery. If jump starting is necessary the following procedure is recommended to prevent starter damage, battery damage, and personal injury.

Warning: Jump starting a battery incorrectly can cause the battery to explode resulting in severe personal injury or death. Do not smoke or allow any ignition sources near the battery and do not jump start a frozen battery.

Warning: Electrical arcing can cause severe personal injury. Do not allow positive and negative cable ends to touch.

1. Disengage Clutch.
2. Use a battery of the same voltage (12V) as is used with your engine.
3. Attach one end of the positive booster cable (red) to the positive (+) terminal of the booster battery. Attach the other end of the terminal of your engine battery.
4. Attach one end of the negative booster cable (black) to the negative (-) terminal on the booster. Attach the other end of the negative cable to your engine battery.
5. Jump starting in any other manner may result in damage to the battery or the electrical system.

Caution: Over cranking the engine can cause starter damage. Allow 5 minutes for starter to cool if engaged for more than 15 seconds.

Caution: When using lights or high amperage draw accessories, idle the engine for a period of 20 minutes to bring the battery to charge state.

PARTS INFORMATION
TABLE OF CONTENTS

2A PARTS

Frame Assembly 2A-2

Engine Mounting System 2A-3-5

Clutch Assembly 2A-6

Driveline Assembly 2A-7

SFC Gearbox Right Hand Sitting on Machine(SOM) . . . . . .2A-8&9

SFC Gearbox Left Hand SOM . . . . . .2A-10&11

STD Gearbox Right Hand Sitting on Machine(SOM) . . . . . .2A-12&13

STD Gearbox Left Hand SOM . . . . . .2A-14&15

Fuel System Assembly . . . . . .2A-16&17

Electrical Components . . . . . .2A-18&19

Wiring Harness 2A-20

Crosshead and Pivot Box Assembly 2A-21

Pitch Control Assembly . . . . . .2A-22&23

Steering Lever Assembly . . . . . .2A-24&25

Spray System Assembly . . . . . .2A-26&27

Spider Assembly . . . . . .2A-28&29

Control Panel Assembly 2A-30

Accessories 2A-31-33

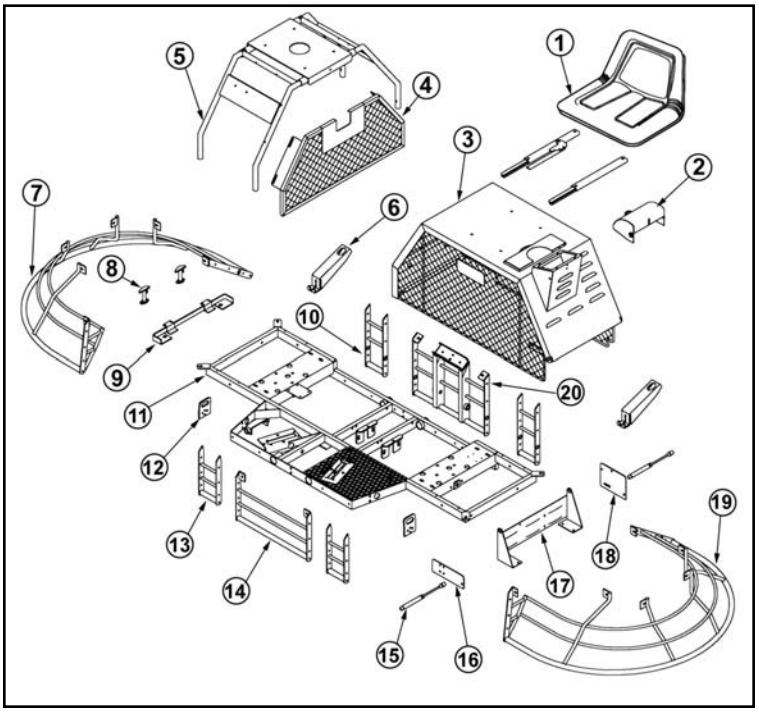
NOTE: All set screws used on MODEL PRO 900-NOL-SFC have blue (LOC-TITE TM) applied at the factory. If set screw is removed or loosened for any reason re-apply blue (LOC-TITE TM).

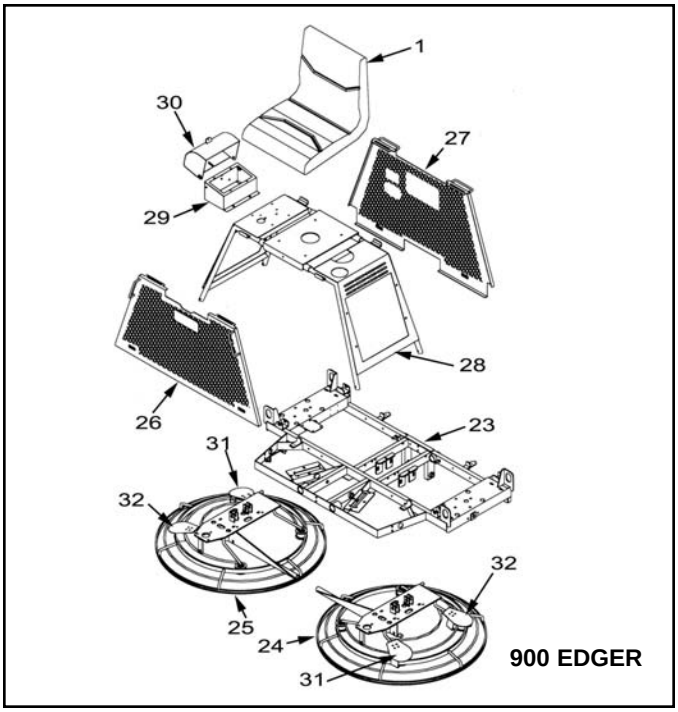
NOTE: All grease fittings on MODEL PRO 900-NOL-SFC are capped with CAP PLUG GC-5 part number #015692 to protect the fitting. If cap becomes missing or damaged replace it as soon as possible.

NOTE: Anti-Seize is applied at the factory to all drive line couplings, gear box main and counter shafts and pitch control threaded rod assemblies. If these parts are disassembled re-apply a light coat of a graphite based anti-seize.

2A PARTS

FRAME ASSEMBLY

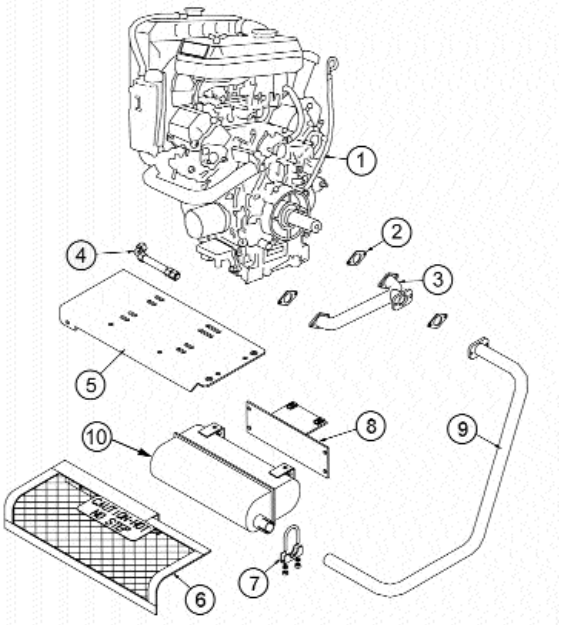




900 EDGER

ILL.	PART #	DESCRIPTION	QTY.
1.	037769	SEAT W/ GLIDES	1
2.	035268	CONTROL PANEL LID (KAWASAKI ONLY)	1
3.	035669	HOOD, SEAT (KAWASAKI ONLY)	1
4.	029005	GUARD, SEAT (HONDA - KOHLER - LINAMAR)	1
5.	036598	FRAME, SEAT (HONDA AND KOHLER)	1
	034309	FRAME, SEAT (LINAMAR)	1
6.	035533	LIFTING LUG REAR (KAWASAKI ONLY)	2
7.	035587	RING, END RH	1
8.	022738	HOOD LATCH (KAWASAKI ONLY)	2
9.	035502	HOOD REST (KAWASAKI ONLY)	1
10.	026976	SPACER, REAR RING	2
11.	034271	FRAME, MAIN (HONDA - KOHLER)	1
	035501	FRAME, MAIN (KAWASAKI - LINAMAR)	1
12.	029890	LIFTING LUG FRONT (KAWASAKI ONLY)	2
13.	026975	SPACER, FRONT RING	2
14.	026892	RING, FRONT	1
15.	036552	SHOCK 60 lbs (KAWASAKI ONLY)	2
16.	035562	FRONT SHOCK MOUNT PLATE (KAWASAKI ONLY)	1
17.	035523	PIVOT, HOOD (KAWASAKI ONLY)	1
18.	035596	REAR SHOCK MOUNT PLATE (KAWASAKI ONLY)	1
19.	035586	RING, END LH	1
20.	026893	RING, REAR	1
21.	035944	BUSHING, BRONZE 1/2” (KAW ONLY) NOT SHOWN	2
22.	035945	1/2”X1/2” SHOULDER BOLT(KAW ONLY) NOT SHOWN	2
23.	041649	FRAME, MAIN (900 EDGER ONLY)	1
24.	041660	RING, LH SOM (900 EDGER ONLY)	1
25.	041659	RING, RH SOM (900 EDGER ONLY)	1
26	041687	SCREEN, FRONT (900 EDGER ONLY)	1
27.	041655	SCREEN, REAR (900 EDGER ONLY)	1
28	041639	FRAME, SEAT (900 EDGER ONLY)	1
29.	041630	BOX, CONTROL PANEL (900 EDGER ONLY)	1
30.	038407	LID, CONTROL PANEL BOX (900 EDGER ONLY)	1
31.	041683	COVER, ROLLER RH (900 EDGER ONLY)	2
32.	041681	COVER, ROLLER LH (900 EDGER ONLY)	2

ENGINE MOUNTING SYSTEM

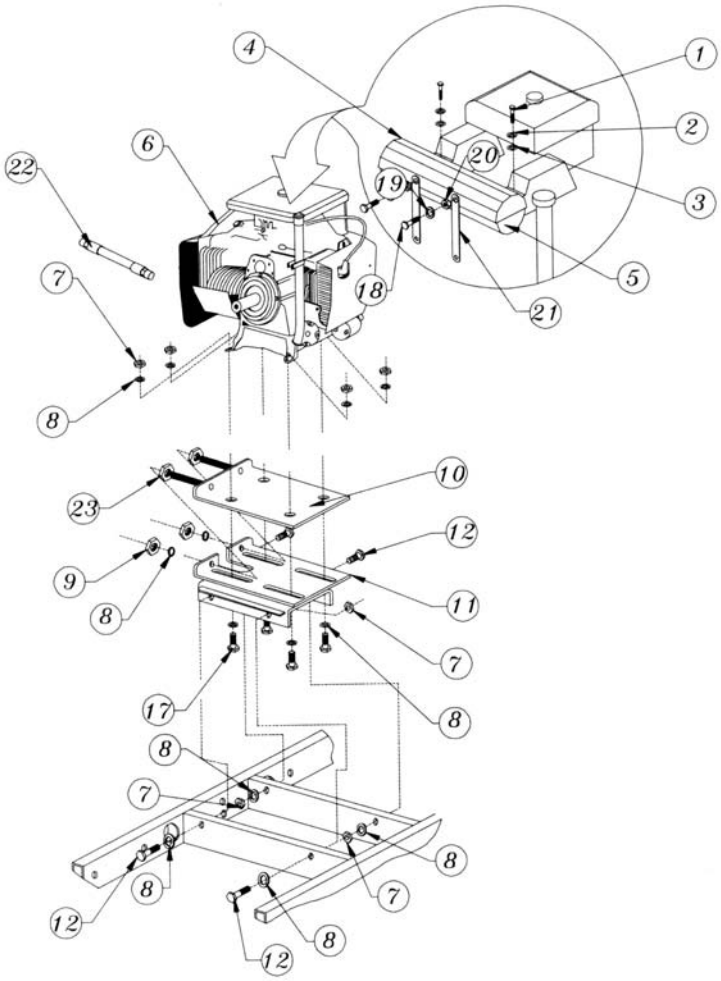


KAWASAKI ENGINE MOUNTING SYSTEM PARTS

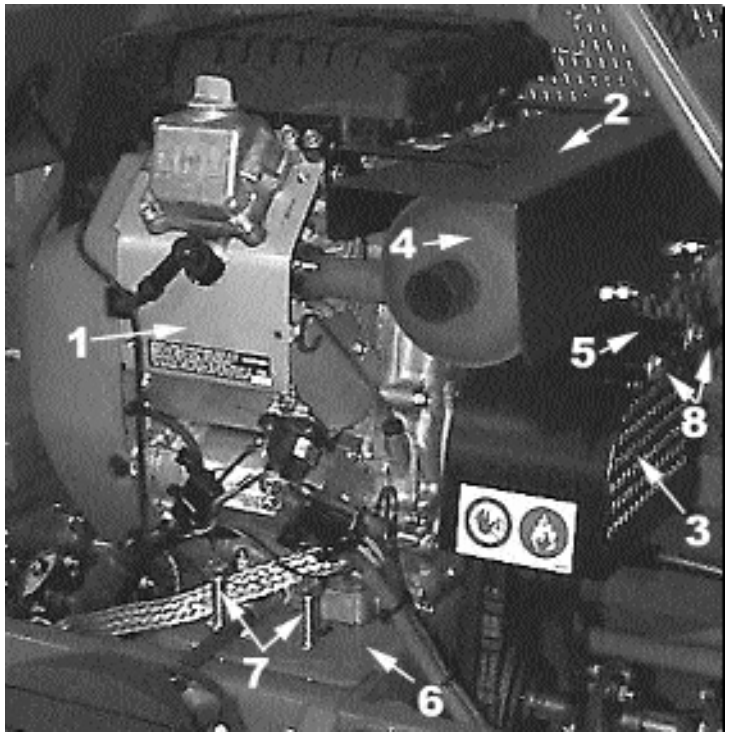
ILL.	PART #	DESCRIPTION	QTY.
1.	034235	ENGINE, 22HP KAWASAKI	1
2.	035463	GASKET	3
3.	034413	HEADER	1
4.	036943	OIL DRAIN HOSE	1
5.	035949	ENGINE MOUNT PLATE	1
6.	034401	MUFFLER GUARD	1
7.	034617	MUFFLER CLAMP	1
8.	037641	MUFFLER MOUNTING BRACKET	1
9.	036784	TAILPIPE	1
10.	039411	MUFFLER, KAWASAKI	1

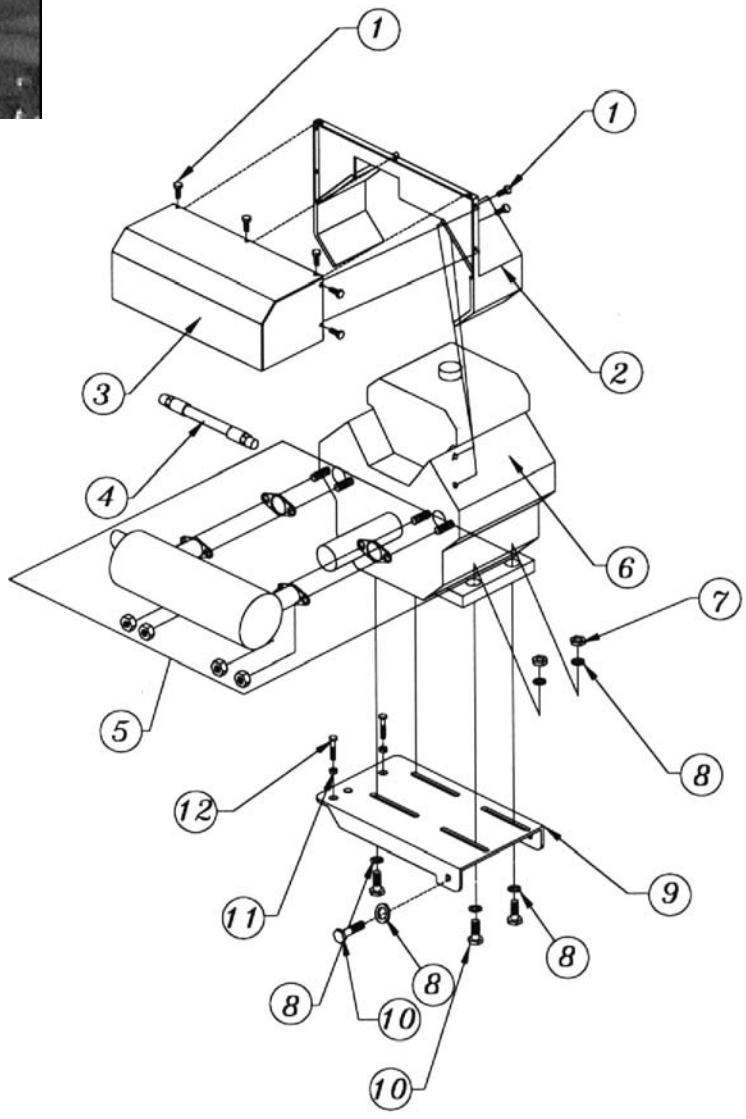
LINAMAR ENGINE MOUNTING SYSTEM PARTS

ILL.	PART #	DESCRIPTION	QTY.
1.	010002	FSTN, HHCS 1/4-20 X 3/4	2
2.	010089	FSTN, LW 1/4”	2
3.	010081	FSTN, FW 1/4”	2
4.	026423	GUARD MUFFLER	1
5.	032293	MUFFLER	1
6.	026328	ENGINE, 20 HP LINAMAR	1
7.	020514	FSTN, STOVER LOCK 3/8-16	8
8.	017751	FSTN, FW HARD A235 3/8	18
9.	010464	FSTN, NUT NYLOCK 3/8-16	2
10.	026914	PLATE, ENGINE TOP	1
11.	026794	PLATE, ENGINE BOTTOM	1
12.	010039	FSTN, HHCS 3/8-16 X 1-3/4	8
17.	010038	FSTN, HHCS 3/8-16 X 1-1/2	4
18.	010019	FSTN, HHCE 5/16-18 X 3/4	2
19	010090	FSTN, LW 5/16	2
20.	010100	FSTN, NUT HES 5/16-18	2
21.	038124	STRAP, MUFFLER	2
22.	010102	FSTN, NUT HEX 3/8-16	2
23.	028806	HOSE, OIL DRAIN	1



ENGINE MOUNT SYSTEM





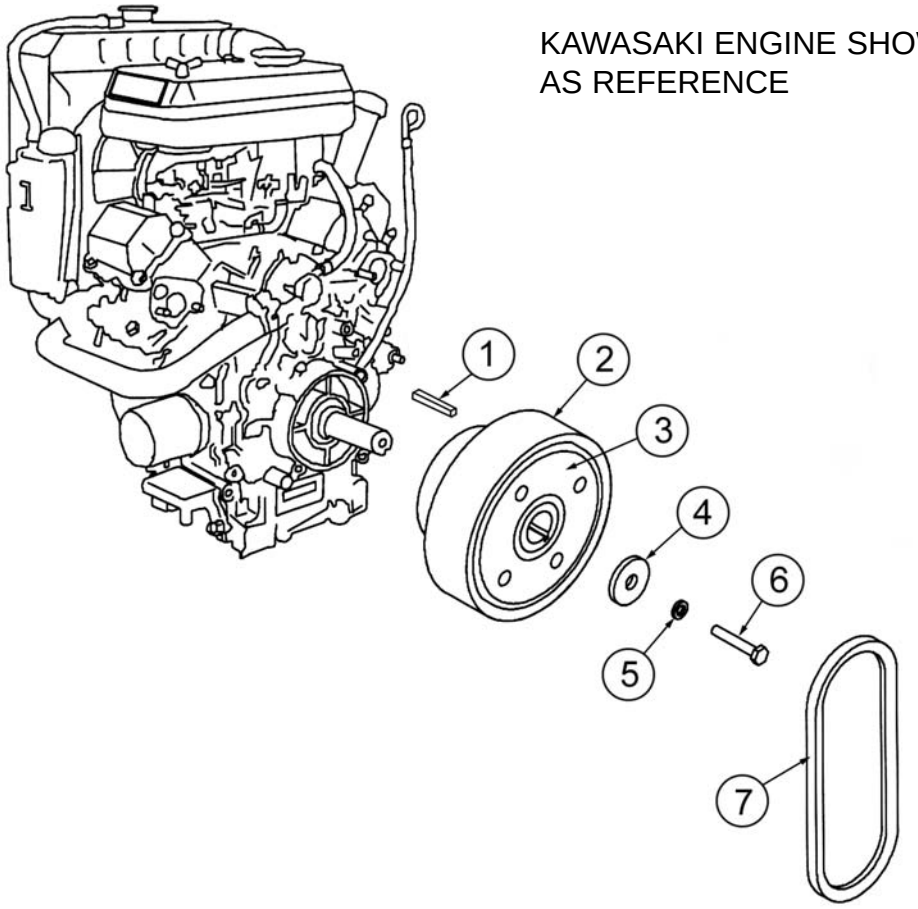
HONDA ENGINE MOUNTING SYSTEM PARTS LIST

ILL.	PART #	DESCRIPTION	QTY.
1	028973	ENGINE, HONDA 20 HP	1
2	032253	GUARD, MUFFLER 20 HP HONDA	1
3	029921	GUARD, BELT	1
4	029839	MUFFLER, HONDA 20 HP	1
5	029891	STRAP, MUFFLER	2
6	029871	PLATE, MOTOR MNT	1
7	038388	FSTN, HHTB 1/2-13 X 3	2
8	010106	FSTN, NUT HEX 1/2-13	2
9	029899	SUPPORT, MUFFLER (NOT SHOWN)	1
10	010019	FSTN, HHCS 5/16-18 X 3/4	2
11	010090	FSTN, LW 5/16	2
12	010100	FSTN, NUT HEX 5/16-18	2
13	022556	FSTN, HHCS 7/16-14 X 7	2
14	010092	FSTN, LW 7/16	2
15	010039	FSTN, HHCS 3/8-16X 1 3/4	6
16	020514	FSTN, NUT STOVER LOCK 3/8-16	6
17	017751	FSTN, FW HARD A235 3/8	12

KOHLER ENGINE MOUNTING SYSTEM PARTS LIST

ILL.	PART #	DESCRIPTION	QTY.
1	033187	FSNT, FHMS 6MM X 10MM	9
2	029463	BRKT, FRONT (KOHLER MUFFLER)	1
3	029471	GUARD, MUFFLER KOHLER	1
4	028806	HOSE, OIL DRAIN	1
5	024934	MUFFLER, KOHLER ENGINE	1
6	028974	ENGINE, KOHLER 25HP	1
7	020514	FSTN, STOVER LOCK 3/8-16	8
8	017751	FSTN, FW HARD A235 3/8	10
9	035949	PLATE, ENGINE MOUNT	1
10	010039	FSTN, HHCS 3/8-16 X 1-3/4	4
11	010106	FSTN, NUT HEX 1/2-13	2
12	022898	FSTN, SQHMB 1/2-13 X 2-1/2	2

CLUTCH ASSEMBLY

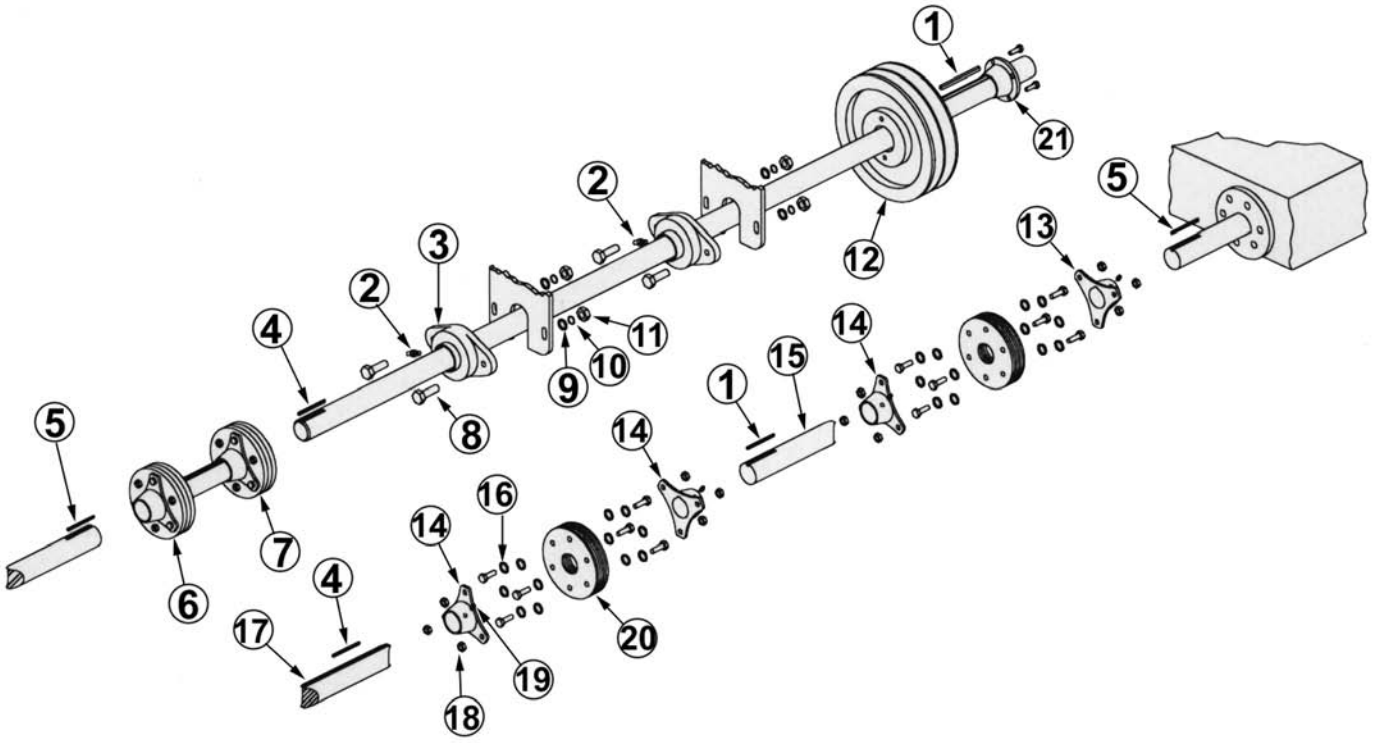


KAWASAKI ENGINE SHOWN
AS REFERENCE

ILL.	PART #	DESCRIPTION	QTY.
1.	026992	KEY	1
2.	032685	DRIVEN BODY - OUTER CLUTCH BODY (BLUE)	1
	038933	DRIVEN BODY - OUTER CLUTCH BODY (GREEN)	1
3.	033447	INNER CLUTCH ASSEMBLY (BLUE)	1
	038934	INNER CLUTCH ASSEMBLY (GREEN)	1
4.	026433	PRESSURE WASHER	1
5.	010095	FSTN, LW 5/8" (KOHLER ONLY)	1
	021072	FSTN, LW 10MM	1
6.	010048	BOLT, CLUTCH (HONDA)	1
	021364	BOLT, CLUTCH (KAWASAKI)	1
	024637	BOLT, CLUTCH (KOHLER - LINAMAR)	1
7.	020729	V-BELT B36 GOODYEAR (HONDA)	2
	039744	V-BELT B37 GOODYEAR (KAWASAKI - LINAMAR)	2
	028896	V-BELT B38 GOODYEAR (KOHLER)	2

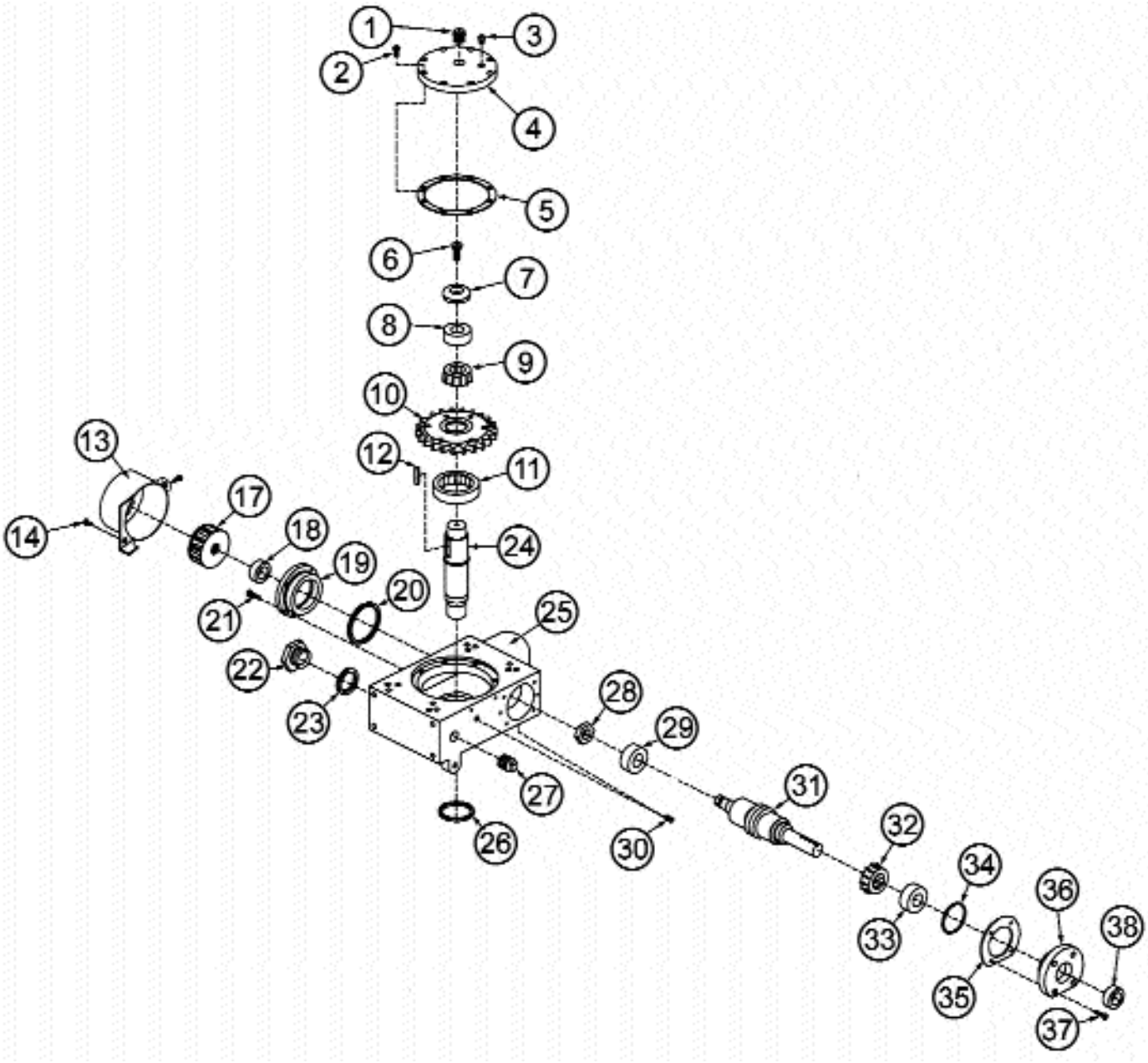
8" CLUTCH W/ 1-1/8" BORE .....PART# 034113 (KAWASAKI ONLY)
8" CLUTCH W/ 1-7/16" BORE .....PART# 032656 (KOHLER - LINAMAR)
NORAM 6000 W/ 1" BORE .....PART# 029953 (HONDA ONLY) (SOLD AS ONE UNIT)

DRIVELINE ASSEMBLY



ILL.	PART #	DESCRIPTION	QTY.
1	024726	KEY, 1/4” SQ X 3” LG	3
2	018511	ALEMITE, 1/4-28 X 90 DEG	2
3	019334	BEARING 2 BOLT FLANGE X 1” BORE	2
4	024976	KEY, 1/4” SQ X 1-1/4” LG	2
5	015813	KEY, 3/16” SQ X 1” LG	2
6	024967	COUPLER, 3/4 X 1 FLEX DISC	2
7	024968	COUPLER, 1 X 1 FLEX DISC	2
8	010054	FSTN, HHCS 7/16- 14 X 1-1/2	4
9	011490	FSTN, FW HARDNED 1/2”	4
10	010092	FSTN, LW 7/16”	4
11	010104	FSTN, NUT HEX 7/16-14	4
12	022551	PULLEY, 2BK-80	1
13	024987	COUPLER 3/4” FLEX	2
14	024988	COUPLER 1” FLEX	6
15	024971	SHAFT, DRIVE END 3-1/8	2
16	024989	FSTN, WASHER FLEX CPLR 5/16”	48
17	028805	SHAFT, DRIVE CENTER 17-1/2	1
18	024990	FSTN, NUT STOVER LOCK 5/16”	24
19	010313	FSTN, SHSSKP/NP 5/16-18 X 3/8	16
20	025427	DISC 10 PLY FF FLEX XOUPLER	4
21	010306	BUSHING, H 1”	1

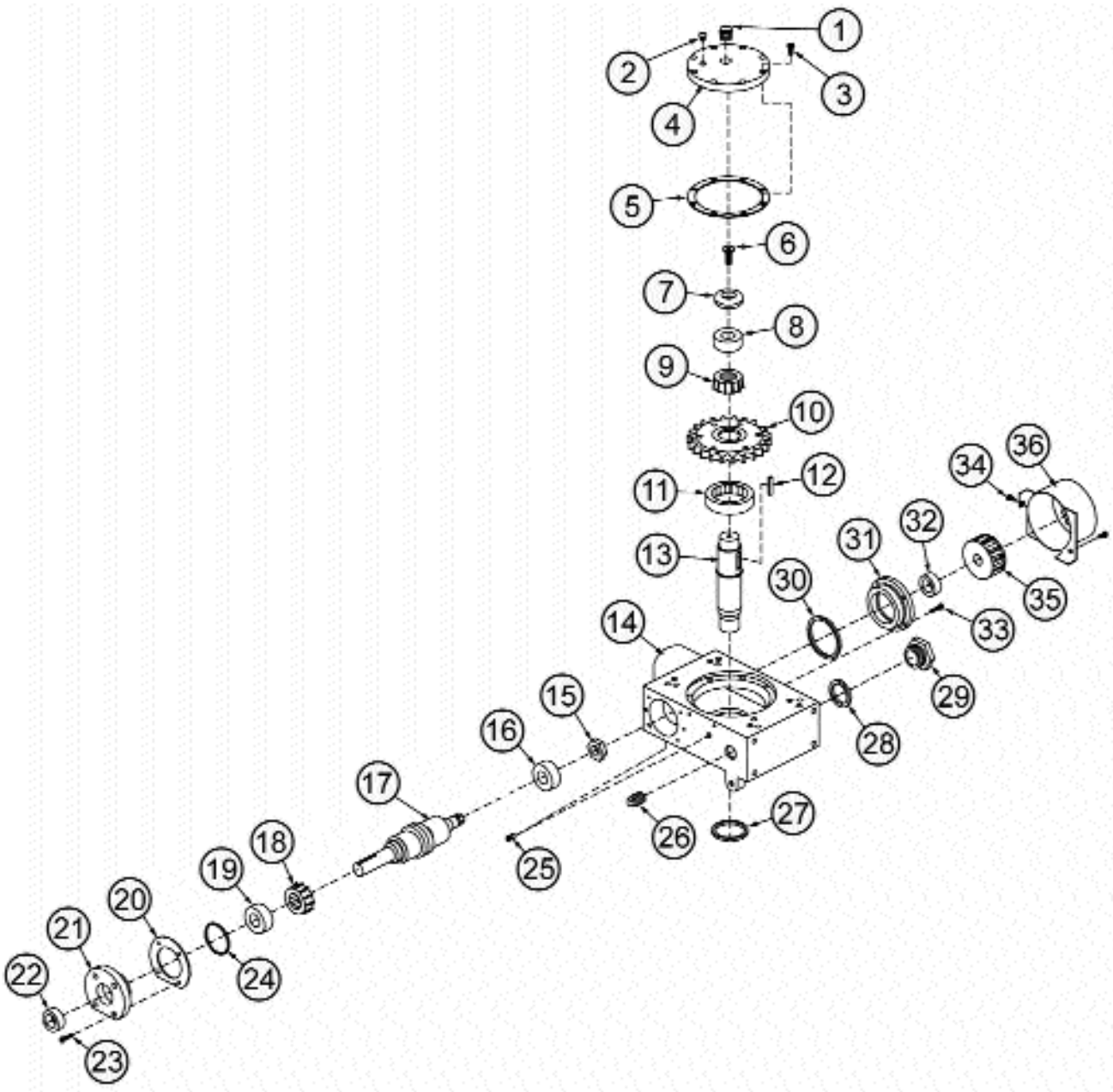
STANDARD FAN COOLED(SFC) GEARBOX
RIGHT HAND SITTING ON MACHINE (SOM)
PART#: 034196



(SFC) GEARBOX RIGHT HAND (SOM)
PART#: 034196 (cont'd)

ILL.	PART #	DESCRIPTION	QTY.
1.	010513	GREASE FITTING 1/4-28 STRAIGHT	1
2.	015205	SCREW 5/16-18 x 1	8
3.	015209	RELIEF VALVE	1
4.	034306	COVER, TOP	1
5.	015210	GASKET, .005 THICK	AS REQ.
	020018	GASKET, .003 THICK	AS REQ.
	032772	GASKET, .002 THICK	AS REQ.
6.	013746	SCREW 3/8-16 x 1 RH	2
7.	015213	PRESSURE WASHER	1
8.	022074	BEARING RACE	1
9.	022073	TAPERED ROLLER	1
10.	018924	GEAR, BRONZE LH	1
11.	015217	BEARING, RADIAL BALL	1
12.	015696	KEY, 1/4 x 1-1/4	1
13.	035633-R	COVER, FAN SHROUD	1
14.	037484	SCREW, 10-32 x 3/8	2
17.	035591	FAN	1
18.	035315	SEAL, OIL	1
19.	035590	FLANGE, FAN SIDE	1
20.	015660	O-RING, FLANGE CAPS	1
21.	017314	BOLT, 1/4-20 x 5/8	4
22.	015672	SIGHT GLASS	1
23.	015673	O-RING	1
24.	020120	SHAFT MAIN DRIVE	1
25.	015204	GEAR BOX, MACHINE FINISHED	1
26.	015671	OIL SEAL	1
27.	012953	PLUG, 3/4 NPT	1
28.	015662	JAM NUT 5/8-18	1
29.	015663	BEARING, ANGULAR CONTACT	1
30.	010498	PLUG, 3/8 NPT	2
31.	035594	SHAFT, INPUT	1
32.	015668	BEARING, TAPERED ROLLER	1
33.	015669	BEARING, RACE	1
34.	015660	O-RING, FLANGE CAPS (SAME AS ILL.# 20)	1
35.	015222	GASKET, .005 THICK	AS REQ.
	022185	GASKET, .002 THICK	AS REQ.
	022186	GASKET, .003 THICK	AS REQ.
36.	015223	CAP, FLANGE	1
37.	017314	BOLT, 1/4-20 x 5/8 (SAME AS ILL.# 21)	4
38.	015670	OIL SEAL	1

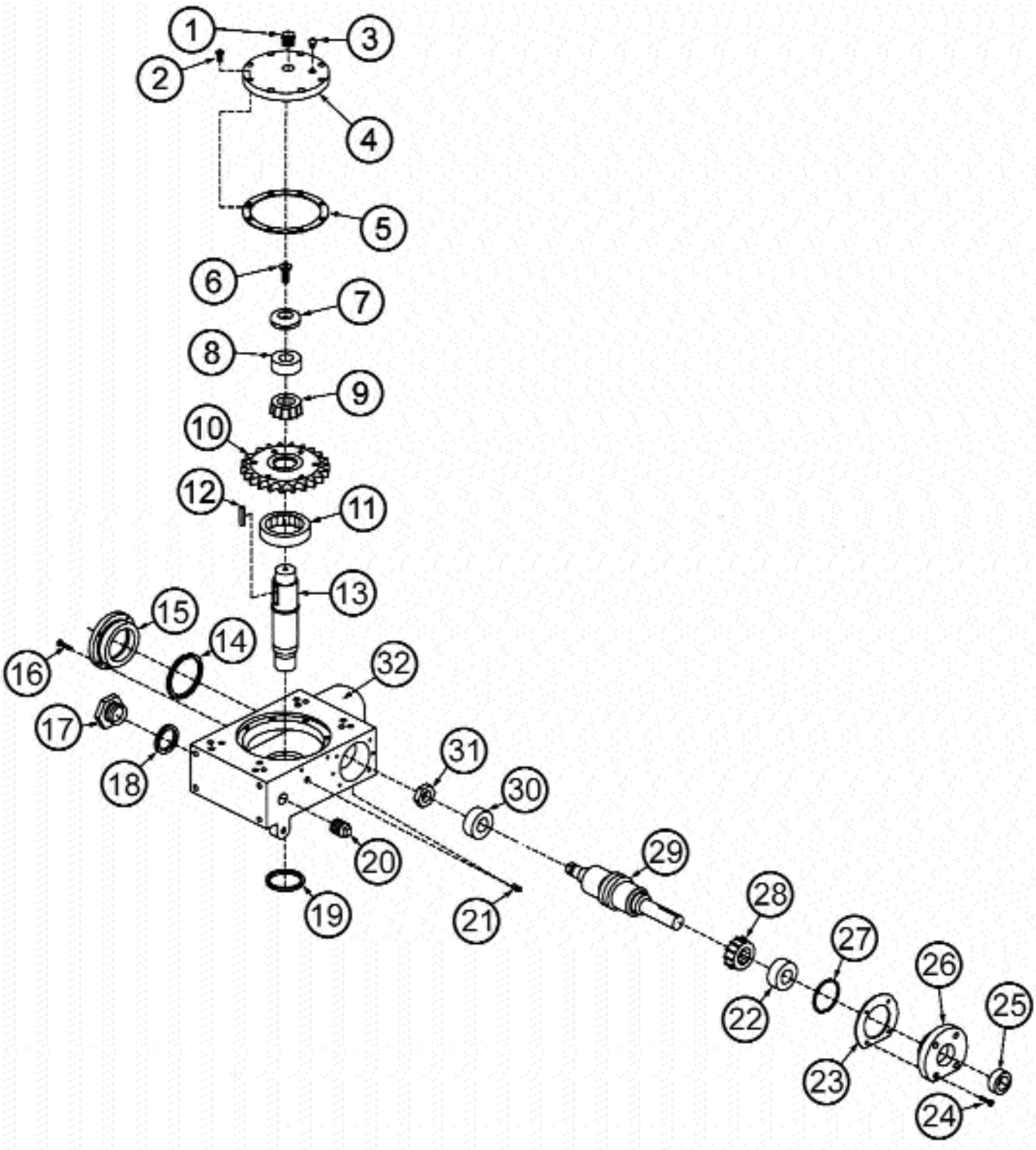
SFC GEARBOX LEFT HAND (SOM)
PART#: 034197



SFC GEARBOX LEFT HAND (SOM)
PART#: 034197 (cont'd)

ILL.	PART #	DESCRIPTION	QTY.
1.	010513	GREASE FITTING 1/4-28 STRAIGHT	1
2.	015209	RELIEF VALVE	1
3.	015205	BOLT, 5/16-18 x 1	8
4.	026406	TOP COVER	1
5.	015210	GASKET, .005 THICK	AS REQ.
	020018	GASKET, .003 THICK	AS REQ.
	032772	GASKET, .002 THICK	AS REQ.
6.	013746	SCREW, 5/16-18 x 1	2
7.	015213	PRESSURE WASHER	1
8.	022074	BEARING, RACE	1
9.	022073	BEARING, TAPERED ROLLER	1
10.	015216	BRONZE GEAR RH	1
11.	015217	BEARING, RADIAL BALL	1
12.	015696	KEY 1/4 x 1 1/4	1
13.	015219	SHAFT, MAIN	1
14.	015204	GEARBOX, MACHINED FINISHED	1
15.	020688	JAM NUT 5/8-18	1
16.	015663	BEARING, ANGULAR CONTACT	1
17.	035593	SHAFT, INPUT	1
18.	015688	BEARING, TAPERED ROLLER	1
19.	015669	BEARING, RACE	1
20.	015222	GASKET, .005 THICK	AS REQ.
	022185	GASKET, .002 THICK	AS REQ.
	022186	GASKET, .003 THICK	AS REQ.
21.	015223	FLANGE, SIDE CAP	1
22.	015670	OIL SEAL	1
23.	017314	BOLT, 1/4-20 x 5/8	4
24.	015660	O-RING, END CAPS	1
25.	010498	PLUG, 3/8 NPT	2
26.	012953	PLUG, 3/4 NPT	1
27.	015671	OIL SEAL	1
28.	015673	O-RING	1
29.	015672	SIGHT GLASS	1
30.	015660	O-RING, END CAPS (SAME AS ILL.# 24)	1
31.	035590	FLANGE, FAN SIDE	1
32.	035315	OIL SEAL	1
33.	017314	BOLT, 1/4-20 x 5/8 (SAME AS ILL.# 23)	4
34.	037484	SCREW, 10-32 x 3/8	2
35.	035592	FAN	1
36.	035633-L	FAN SHROUD	1

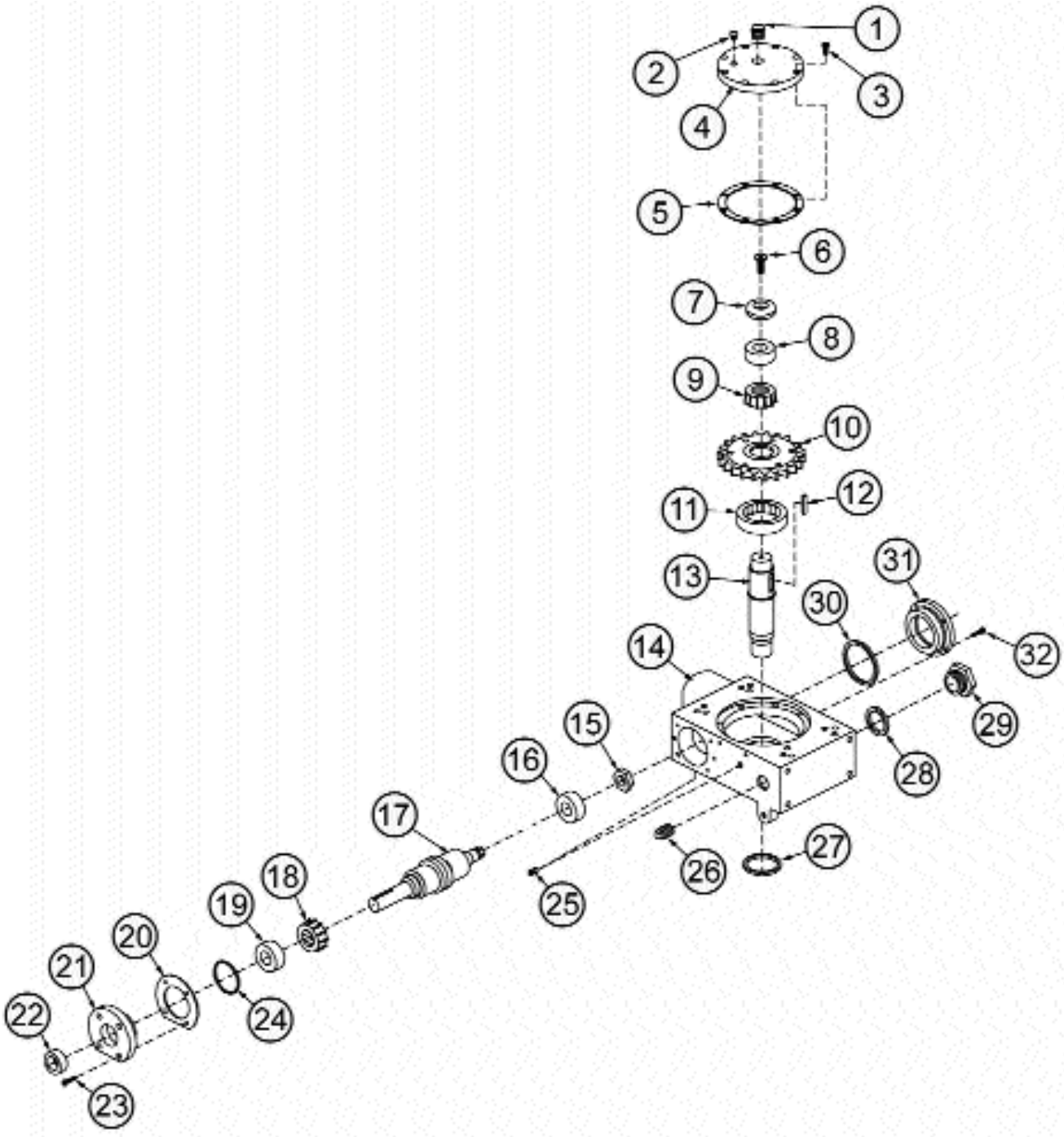
STANDARD(STD) GEARBOX
RIGHT HAND SITTING ON MACHINE(SOM)
PART#: 026443



STD GEARBOX RIGHT HAND(SOM)
PART#: 026443

ILL.	PART #	DESCRIPTION	QTY.
1.	201163	ALEMITE	1
2.	015205	BOLT, 5/16-18 X 1	8
3.	015209	VALVE, RELIEF 1/8 NPT-27	1
4.	026406	TOP COVER	1
5.	015210	GASKET, .005 THICK	AS REQ.
	020018	GASKET, .003 THICK	AS REQ.
	032772	GASKET, .002 THICK	AS REQ.
6.	013746	SCREW, 3/8-16 x 1 RH	1
7.	015213	PRESSURE WASHER	1
8.	022074	BEARING, RACE	1
9.	022073	BEARING, TAPERED ROLLER	1
10.	018924	BRONZE GEAR LH	1
11.	015217	BEARING, RADIAL BALL	1
12.	015696	KEY 1/4 x 1 1/4	1
13.	020120	SHAFT, MAIN	1
14.	015660	O-RING	1
15.	015223	FLANGE, GEARBOX	1
16.	017314	BOLT, 1/4-20 X 5/8	4
17.	015672	SIGHTGLASS, 3/4-14 NPT	1
18.	015673	O-RING	1
19.	015671	SEAL, OIL	1
20.	012953	PLUG, 3/4 NPT	1
21.	010498	PLUG, 3/8 NPT	2
22.	015669	BEARING, RACE	1
23.	015222	GASKET, .005 THICK	AS REQ.
	022185	GASKET, .003 THICK	AS REQ.
	022186	GASKET, .002 THICK	AS REQ.
24.	017314	BOLT, 1/4-20 X 5/8	1
25.	015670	SEAL, OIL	1
26.	015221	CAP, END GEARBOX	1
27.	015660	O-RING, END CAP	1
28.	015668	BEARING, TAPERED ROLLER	1
29.	026741	SHAFT, INPUT LH GEARBOX	1
30.	015663	BEARING, ANGULAR CONTACT	1
31.	020688	FSTN, NUT HEX JAM RH 5/8-18	1
32.	015204	GEARBOX, MACHINED	1

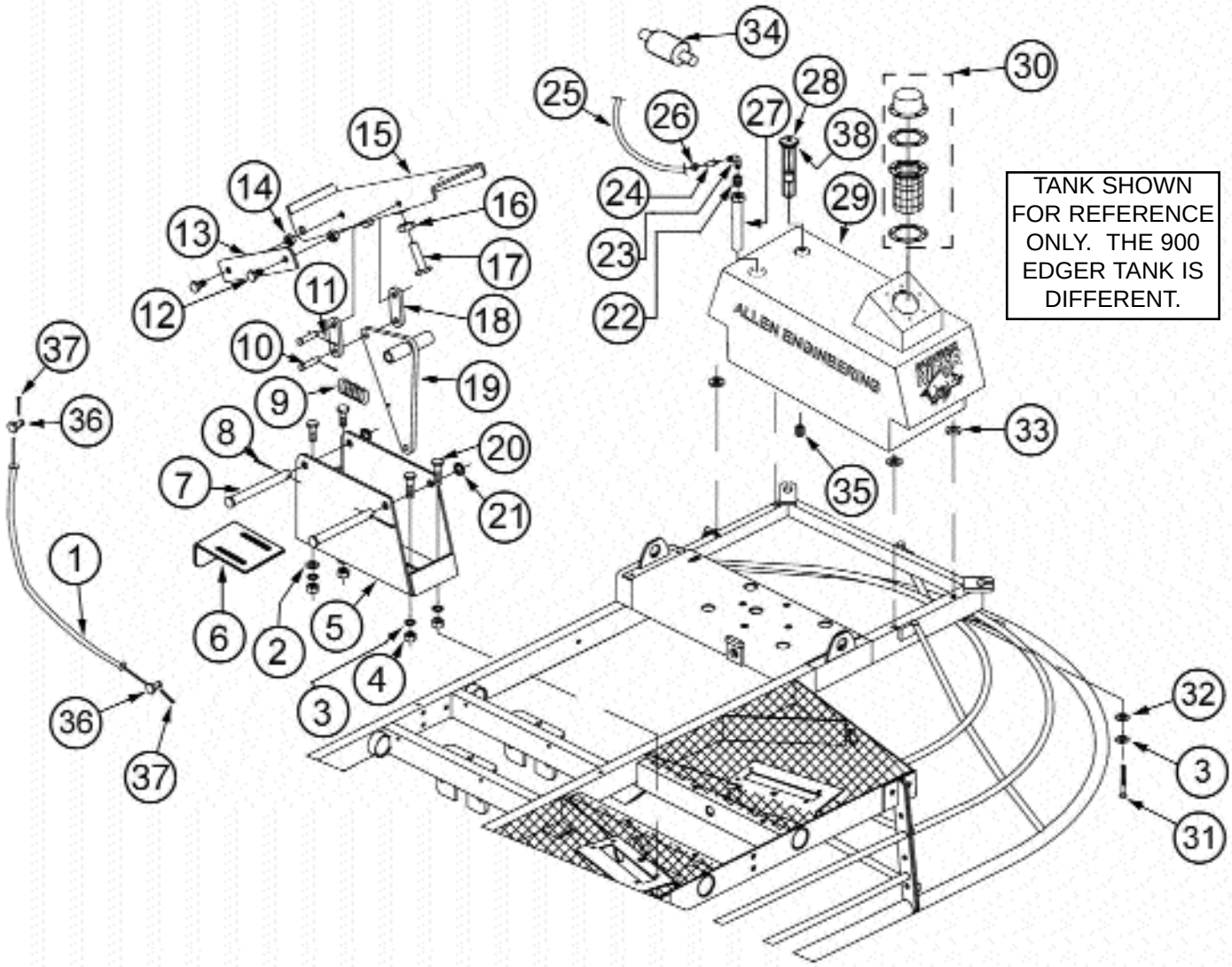
STANDARD(STD) GEARBOX
LEFT HAND SITTING ON MACHINE(SOM)
PART#: 026442



STD GEARBOX LEFT HAND(SOM)
PART#: 026442

ILL.	PART #	DESCRIPTION	QTY.
1.	201163	ALEMITE	1
2.	015209	VALVE, RELIEF 1/8 NPT-27	1
3.	015205	BOLT, 5/16-18 x 1	8
4.	026406	TOP COVER	1
5.	015210	GASKET, .005 THICK	AS REQ.
	020018	GASKET, .003 THICK	AS REQ.
	032772	GASKET, .002 THICK	AS REQ.
6.	015212	SCREW, 3/8-16 X 1LH	1
7.	015213	PRESSURE WASHER	1
8.	022074	BEARING, RACE	1
9.	022073	BEARING, TAPERED ROLLER	1
10.	015216	BRONZE GEAR RH	1
11.	015217	BEARING, RADIAL BALL	1
12.	015696	KEY 1/4 x 1 1/4	1
13.	015219	SHAFT, MAIN	1
14.	015204	GEARBOX, MACHINED FINISHED	1
15.	015662	JAM NUT 5/8-18	1
16.	015663	BEARING, ANGULAR CONTACT	1
17.	026740	SHAFT, INPUT	1
18.	015668	BEARING, TAPERED ROLLER	1
19.	015669	BEARING, RACE	1
20.	015222	GASKET, .005 THICK	AS REQ.
	022185	GASKET, .002 THICK	AS REQ.
	022186	GASKET, .003 THICK	AS REQ.
21.	015223	FLANGE, SIDE CAP	1
22.	015670	OIL SEAL	1
23.	017314	BOLT, 1/4-20 x 5/8	4
24.	015660	O-RING, END CAPS	1
25.	010498	PLUG, 3/8 NPT	2
26.	012953	PLUG, 3/4 NPT	1
27.	015671	OIL SEAL	1
28.	015673	O-RING	1
29.	015672	SIGHT GLASS	1
30.	015660	O-RING, END CAPS (SAME AS ILL.# 24)	1
31.	015221	CAP, END GEARBOX	1
32.	017314	FSTN, SHCS 1/4-20 X 5/8	4

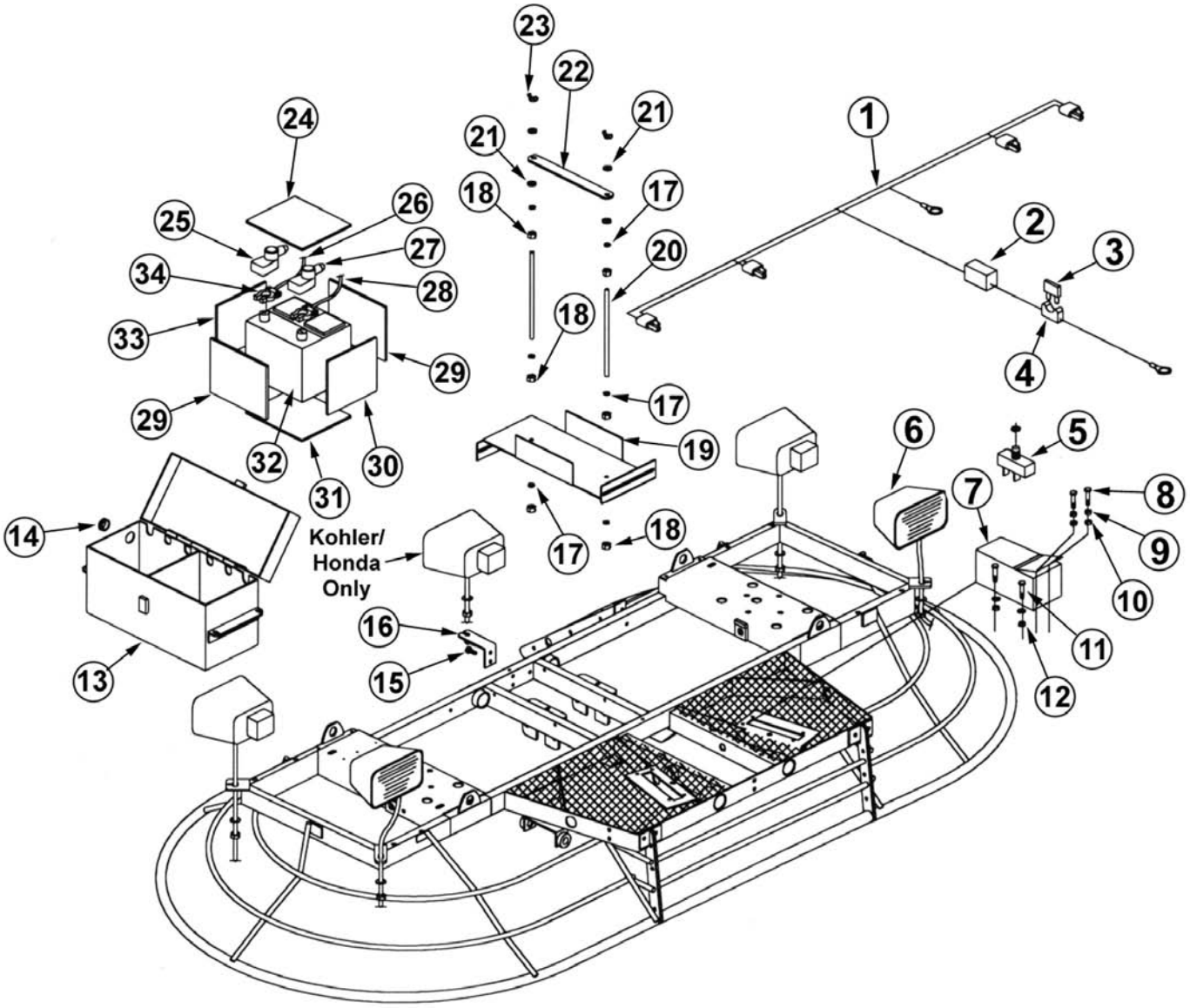
FUEL SYSTEM ASSEMBLY



FUEL SYSTEM ASSEMBLY (cont'd)

ILL.	PART #	DESCRIPTION	QTY.
1.	028243	THROTTLE CABLE 52" HD (HONDA - KAW. - LINAMAR)	1
	032300	THROTTLE CABLE 60" HD (KOHLER ONLY)	1
2.	010081	FLAT WASHER 1/4	10
3.	010089	LOCK WASHER 1/4	4
4.	010098	HEX NUT 1/4-20	4
5.	024851	BASE, FOOT SPEED	1
6.	028526	BRACKET, LOWER HD THROTTLE CABLE	1
7.	028895	PIN, CLEVIS 3/8 x 3 1/2	1
8.	026226	PIN, COTTER 3/32 x 3/4	2
9.	024981	SPRING	1
10.	024982	PIN, CLEVIS 1/4 x 51/64	2
11.	010131	PIN. COTTER 1/16 x 1	2
12.	010001	BOLT, 1/4-20 x 1/2	2
13.	024985	PLATE, STOP	1
14.	020542	NUT, STOVER 1/4-20	2
15.	024839	PEDAL, FOOT SPEED	1
16.	010100	NUT, HEX 5/16-18	1
17.	010021	BOLT, 5/16-18 x 1 1/4	1
18.	024850	SHACKLE	2
19.	024847	FULCRUM, FOOT SPEED	1
20.	010003	BOLT, 1/4-20 x 1	2
21.	010082	FLAT WASHER 5/16	2
22.	012941	BUSHING, 1/2 x 1/4 HEX	1
23.	010220	ELBOW, 1/4 x 1/4 90^{O} STREET	1
24.	010193	FTG, PUSHLOK 1/4 x 1/4-18	1
25.	019429	HOSE, FUEL 5/16 DIA.	AS REQ.
26.	019430	CLAMP, #4 HOSE	4
27.	037216	TUBE, SUCTION (FUEL TANK)	1
28.	032295	GAUGE, GAS REMOTE	1
29.	040832	TANK, FUEL W/O CAP	1
	039063	TANK, WATER W/O CAP (KAWASAKI)	2
	041640	TANK, FUEL & WATER (900 EDGER ONLY)	2
30.	039278R	CAP, RED FUEL FILTER ASSEMBLY	1
	039278B	CAP, BLUE WATER FILTER ASSEMBLY	1
31.	010006	BOLT, 1/4-20 x 1 3/4	4
32.	010081	FLAT WASHER 1/4	4
33.	015713	BUSHING, RUBBER	4
34.	023660	IN-LINE FUEL FILTER (KAWASAKI)	1
35.	010497	PLUG, 1/4 NPT BI SQ. PIPE	1
36.	024984	PIVOT, FOOT SPEED CONTROL	2
37.	010131	PIN, COTTER 1/16 x 1	2
38.	034111	GROMMET, RUBBER F/ GAS GUAGE	1

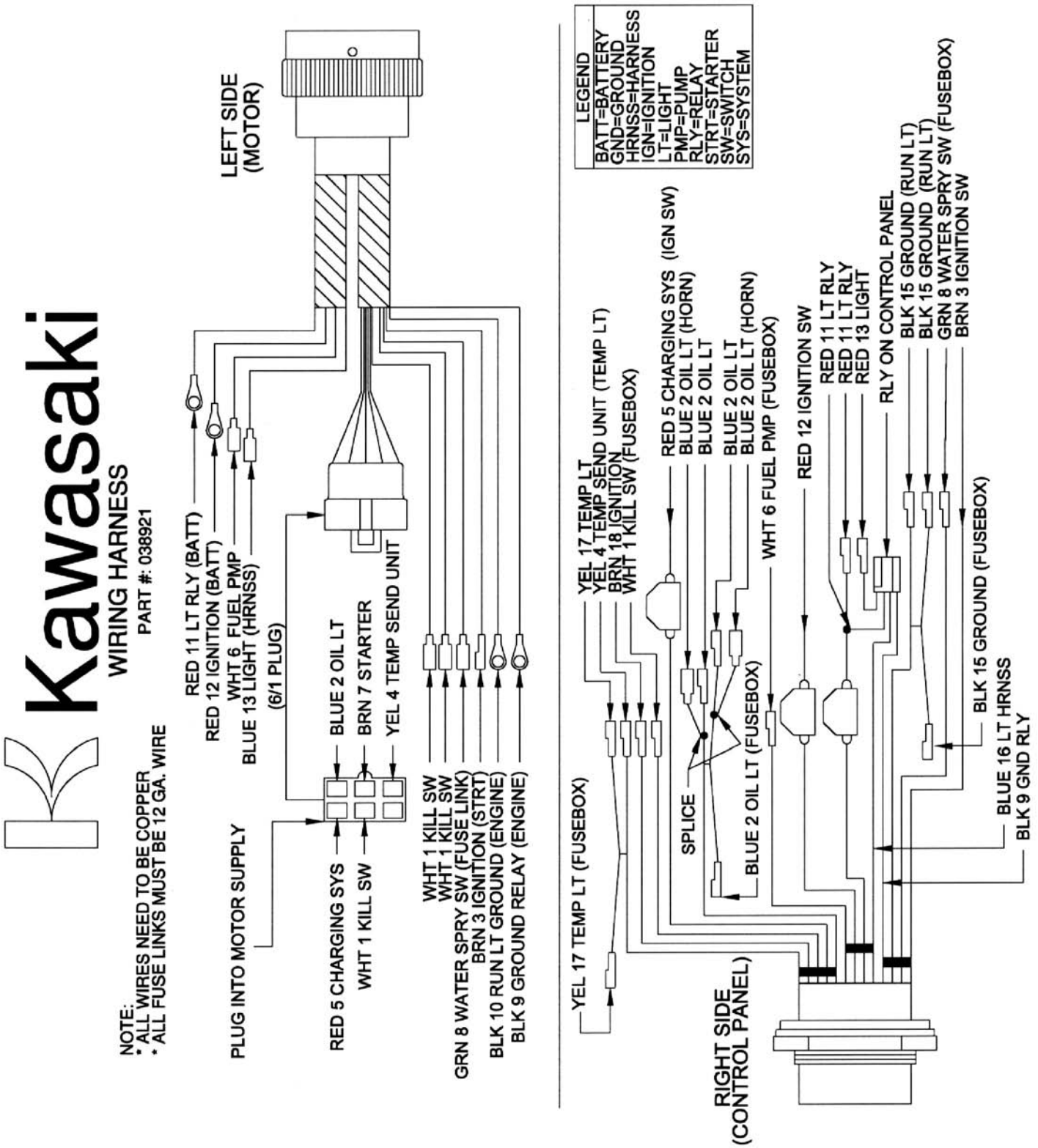
ELECTRICAL COMPONENTS



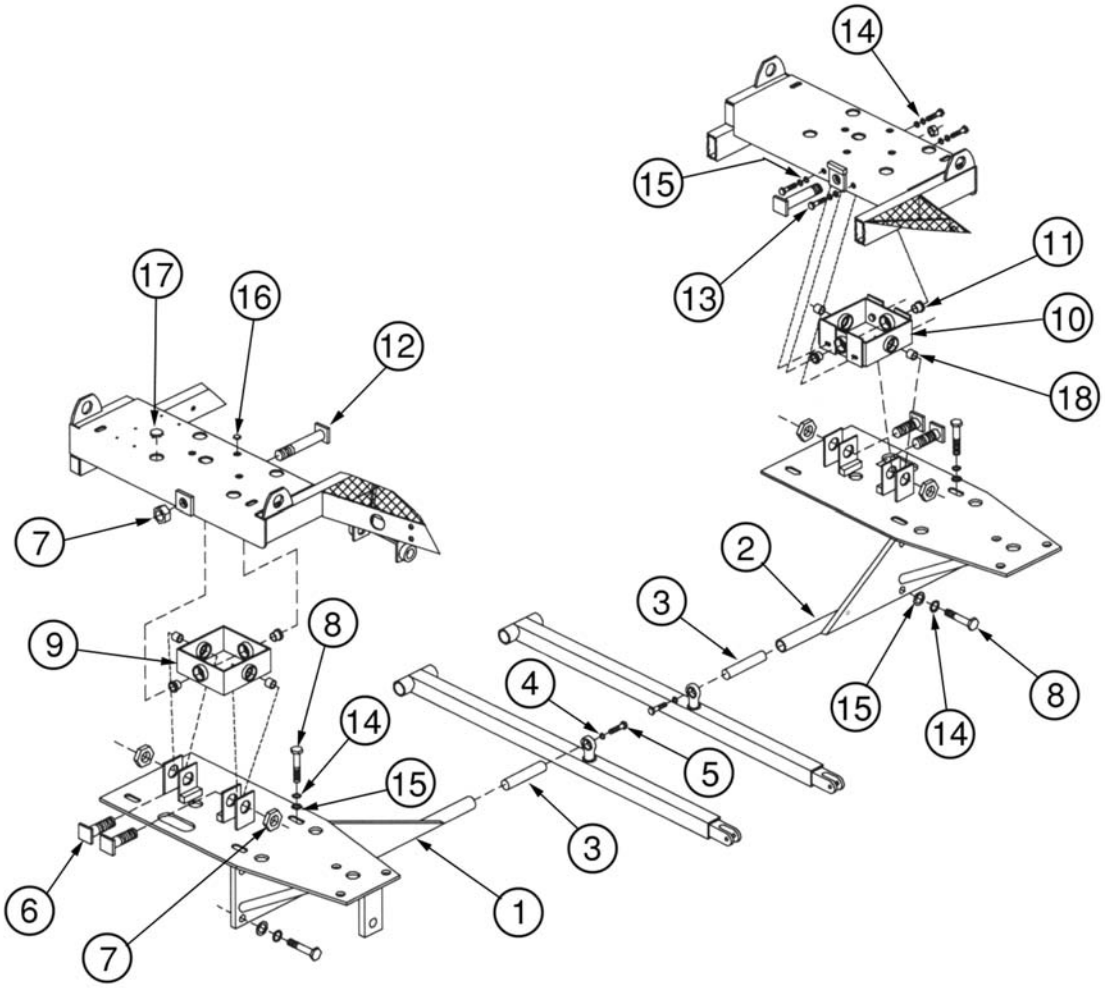
ELECTRICAL COMPONENTS (cont'd)

ILL.	PART #	DESCRIPTION	QTY.
1.	029301	4 LIGHT WIRING HARNESS (KAWASAKI - LINAMAR)	1
	032258	3 LIGHT WIRING HARNESS (KOHLER - HONDA)	1
2.	032125	SWITCH, ROCKER	1
3.	026460	FUSE, 30 AMP	1
4.	026461	FUSE HOLDER	1
5.	032468	KILL SWITCH ASSEMBLY	1
	037800	KILL SWITCH ASSEMBLY (KAWASAKI)	1
	037935	KILL SWITCH ASSEMBLY (900 EDGER)	1
6.	036881	LIGHT, 12 VOLT (KOHLER/HONDA)	3
	036881	LIGHT, 12 VOLT (KAWASAKI)	2
	036881	LIGHT, 12 VOLT (900 EDGER)	4
7.	026103	KILL SWITCH MOUNT	1
8.	010019	BOLT, 5/16-18 X 3/4	2
9.	010090	LOCK WASHER 5/16	2
10.	010082	FLAT WASHER 5/16	2
11.	010002	BOLT, 1/4-20 X 3/4	2
12.	010098	NUT, HEX 1/4-20	2
13.	036796	BATTERY & TOOLBOX (KOHLER - HONDA - LINAMAR)	1
14.	024629	GROMMET, RUBBER (KOHLER - HONDA - LINAMAR)	1
15.	018013	BOLT, 5/16-18 X 2 (KOHLER/HONDA ONLY)	2
16.	026297	LIGHT, MOUNT BRKT (KOHLER/HONDA ONLY)	1
17.	010091	LOCK WASHER 3/8 (KAWASAKI ONLY)	4
18.	015684	NUT, HEX 3/8-16 (KAWASAKI ONLY)	4
19.	035656	PLATE, BATTERY MOUNT (KAWASAKI ONLY)	1
20.	036933	ROD, BATTERY HOLDER (KAWASAKI ONLY)	2
21.	017751	FLAT WASHER HARD 3/8 (KAWASAKI ONLY)	4
22.	033825	CLAMP, BATTERY (KAWASAKI ONLY)	1
23.	013531	NUT, WING 3/8-16 (KAWASAKI ONLY)	2
24.	026453	CUSHION, BATTERY TOP	1
25.	035597	TERMINAL COVER (POSITIVE)	1
26.	019490	CABLE, POSITIVE F/ BATTERY	AS REQ.
27.	035598	TERMINAL COVER (NEGATIVE)	1
28.	026435	CABLE, NEGATIVE F/BATTERY	AS REQ.
29.	026427	CUSHION, BATTERY SIDE F & R	2
30.	026429	CUSHION, BATTERY END W/O HOLE	1
31.	026426	CUSHION, BATTERY BOTTOM	1
32.	023855	BATTERY, 12 VOLT	1
33.	026428	CUSHION, BATTERY END W/ HOLE	1
34.	023869	TERMINAL, BATTERY POST	2

WIRING HARNESS

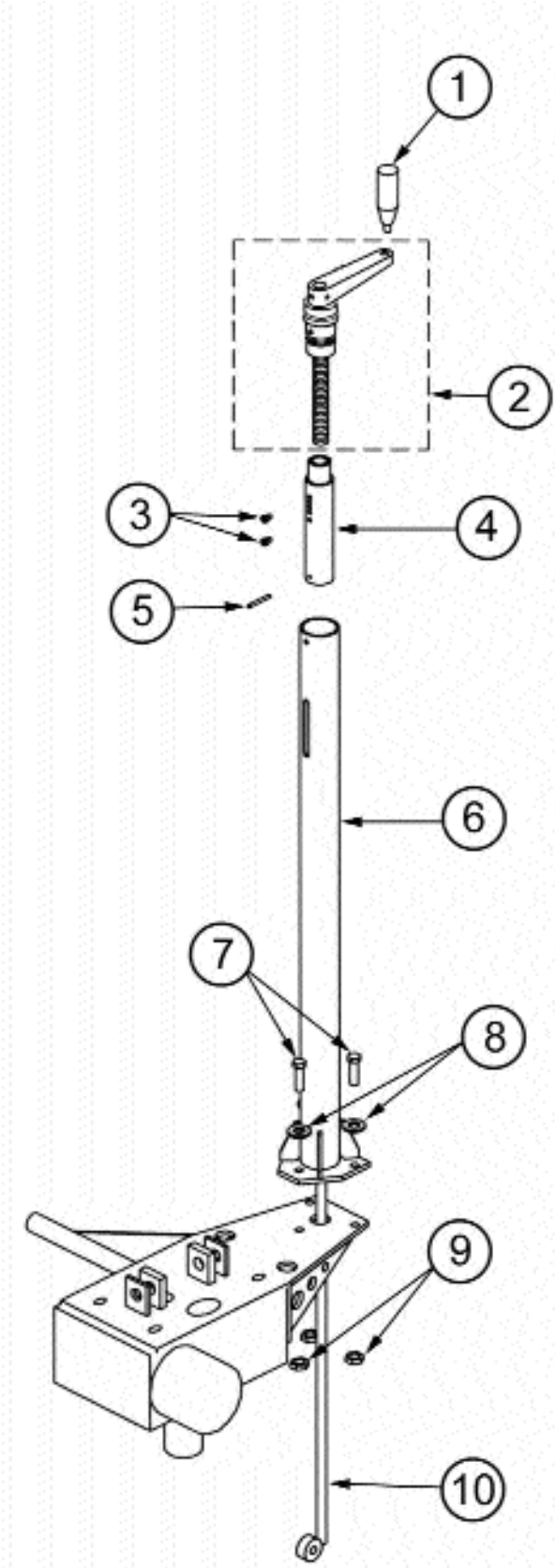


CROSSHEAD AND PIVOT BOX ASSEMBLY



ILL.	PART #	DESCRIPTION	QTY.
1.	026384	CROSSHEAD RH	1
	041659	CROSSHEAD & RINGS (900 EDGER ONLY)	1
2.	026385	CROSSHEAD LH	1
	041660	CROSSHEAD & RINGS (900 EDGER ONLY)	1
3.	026238	INSERT, CONTROL ARM	2
4.	010093	LOCK WASHER 1/2	2
5.	010070	BOLT, 1/2-13 x 1 3/4	2
6.	026175	BOLT, CROSSHEAD MOUNTING	4
7.	026447	NUT, SELF LOCK 3/4-10 NC THIN	6
8.	026474	BOLT, 3/8-16 x 7/8	16
9.	028326R	BOX, CROSSHEAD MOUNTING RH	1
10.	033927	BOX, CROSSHEAD MOUNTING LH	1
11.	024630	BUSHING, BRASS	4
12.	026178	BOLT, CROSSHEAD MOUNTING	2
13.	010037	BOLT, 3/8-16 x 1 1/4	4
14.	010091	LOCK WASHER 3/8	20
15.	017751	FLAT WASHER HARD 3/8	20
16.	026462	PLUG, CHROME 1/2”	8
17.	026463	PLUG, CHROME 1”	10
18.	026248	BUSHING, BRASS	4

PITCH CONTROL ASSEMBLY



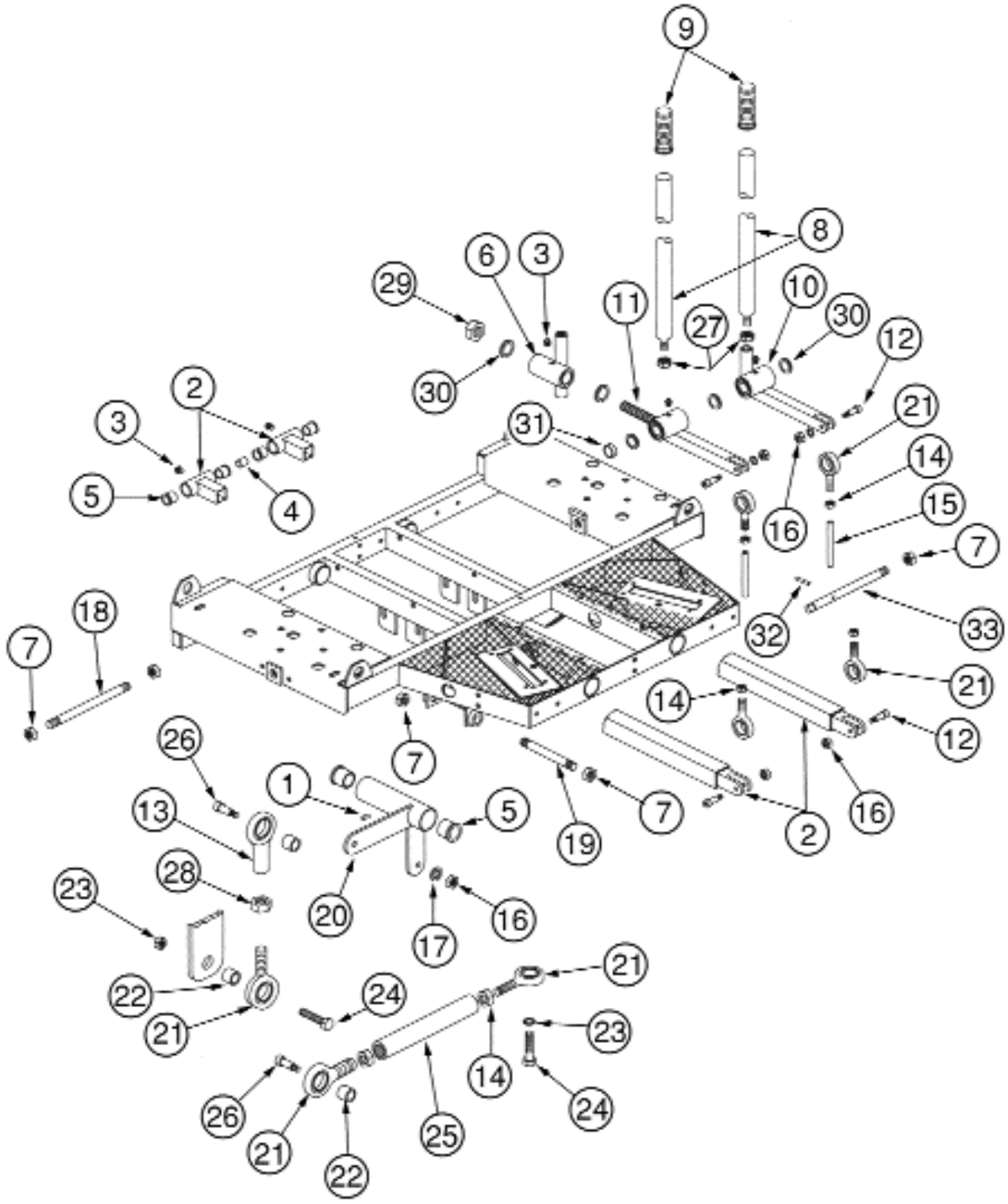
032370 ASSEMBLY

ILL.	PART #	DESCRIPTION	QTY.
1	032115	KNOB, PITCH CONTROL	1
2	026541	CRANK HANDLE AND THREADED ROD	1
3	015768	SOCKET HEAD CAP SCREW 1/4-20 X 1/4	2
4	029812	BUSHING, SLIDE	1
5	015747	PIN, SPIRAL 3/16 X 1-1/2	1
6	026420	ASSEMBLY, TUBE AND PLATE	1
7	010036	BOLT, 3/8-16 X 1	3
8	011751	FW, HARD 3/8	3
9	010464	NUT, NYLOK 3/8-16	3
10	029822	SHAFT	1

037799 ASSEMBLY ***(900 EDGER ONLY)***

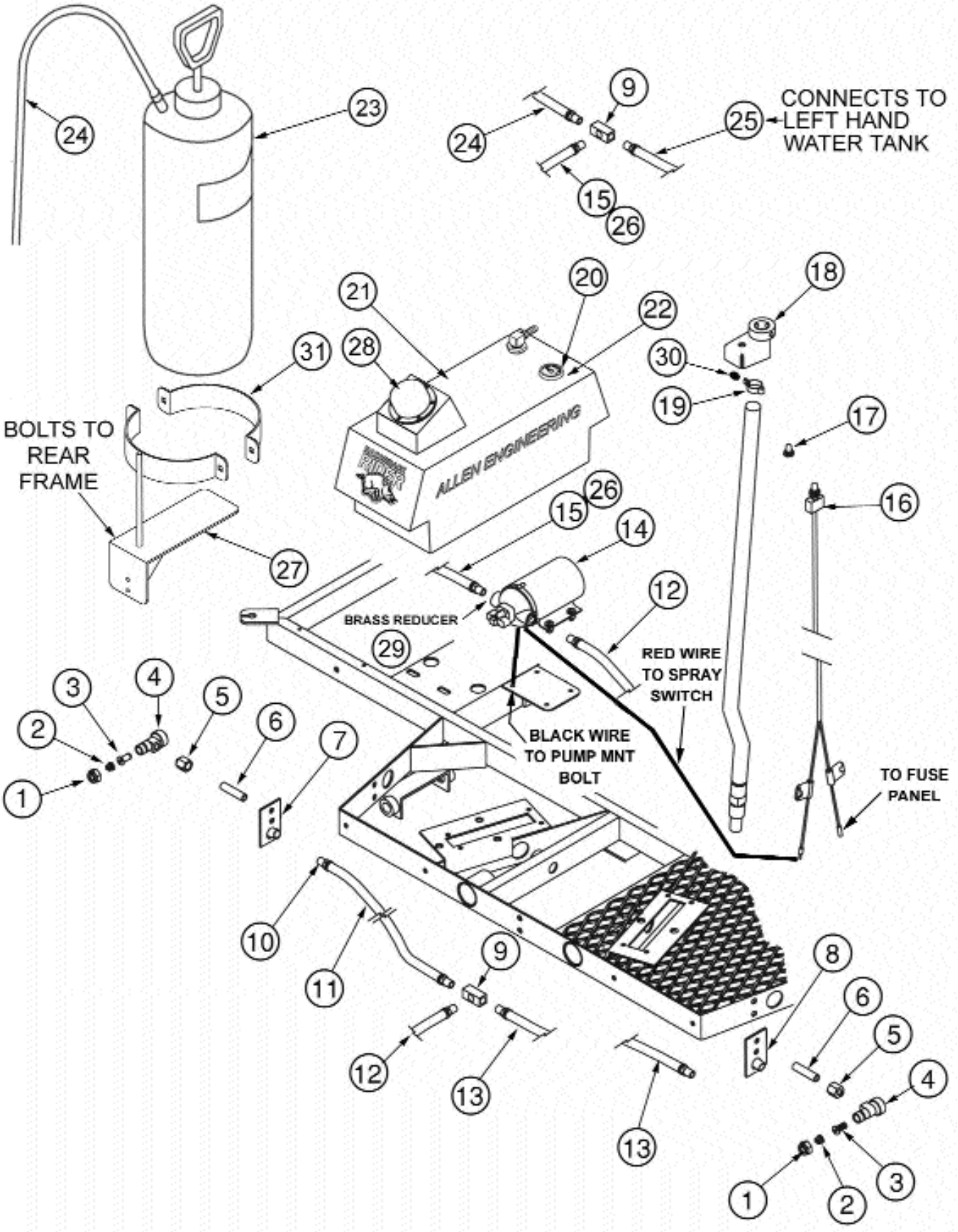
ILL.	PART #	DESCRIPTION	QTY.
1	032115	KNOB, PITCH CONTROL	1
2	040147	CRANK HANDLE AND THREADED ROD	1
3	015768	SOCKET HEAD CAP SCREW 1/4-20 X 1/4	2
4	029812	BUSHING, SLIDE	1
5	015747	PIN, SPIRAL 3/16 X 1-1/2	1
6	037724	ASSEMBLY, TUBE AND PLATE	1
7	010036	BOLT, 3/8-16 X 1	3
8	011751	FW, HARD 3/8	3
9	010464	NUT, NYLOK 3/8-16	3
10	037722	SHAFT	1

STEERING LEVER ASSEMBLY



ILL.	PART #	DESCRIPTION	QTY.
1.	018510	GREASE FITTING 1/4-28 x 45 DEG.	1
2.	026954	LOWER CONTROL ARM	2
	026895	LOWER CONTROL ARM (LINAMAR)	2
	041627	LOWER CONTROL ARM (900 EDGER)	2
3.	201163	GREASE FITTING 1/8-27 NPT STRAIGHT	5
4.	026205	SPACER, CONTROL ARM	2
5.	024630	BUSHING, FLANGE	12
6.	034884	OPERATOR LEVER, LOWER RH	1
	034676	OPERATOR LEVER, LOWER RH (900 EDGER)	1
7.	026447	NUT, SELFLOCK 3/4-10 NC	6
8.	037973	OPERATOR LVR, UPPER	2
	038488	OPERATOR LVR, UPPER (KAWASAKI)	2
	038149	OPERATOR LVR, UPPER (LINAMAR)	2
	037931	OPERATOR LVR, UPPER (900 EDGER)	2
9	037668	GRIP, HANDLE	2
10.	037926	OPERATOR LVR, LOWER LH	1
11.	037929	OPERATOR LVR, UPPER RH	1
12.	026267	BOLT, SHOULDER 1/2 x 1	4
13.	019900	ROD END, 1/2 FEMALE	1
14.	010107	NUT, HEX 1/2-20 NF	6
15.	026784	CONTROL ARM	2
16.	010464	NUT, NYLON LOCK 3/8-16	6
17.	017751	LOCK WASHER (HDN) 3/8	2
18.	026234	SHAFT, CONTROL LEVER MTG.	2
19.	026272	SHAFT, FULCRUM ARM	1
20.	026377	FULCRUM	1
21.	221408	ROD END, 1/2 MALE	7
22.	026412	SPACER 5/16	2
23.	010093	LOCK WASHER 1/2	1
24.	010070	BOLT, 1/2-13 x 1-3/4	2
25.	026922	ARM, STEERING 11"	1
	026791	ARM, STEERING 17" (900 EDGER)	1
26.	026268	BOLT, SHOULDER 1/2 x 1-3/4	2
27.	037933	FSTN, NUT JAM 1"-8	1
28.	032225	NUT, JAM 1/2-20	1
29.	011584	NUT, NYLON LOCK 3/4-10	1
30.	034520	SPACER, BRONZE	5
31.	034444	COLLAR, SET 3/4	1
32.	018289	PIN, ROLL 3/16 X 1-1/4	1
33.	034442	BAR, STEERING	1
34.	026413	SPACER, 1/2	1

SPRAY SYSTEM ASSEMBLY

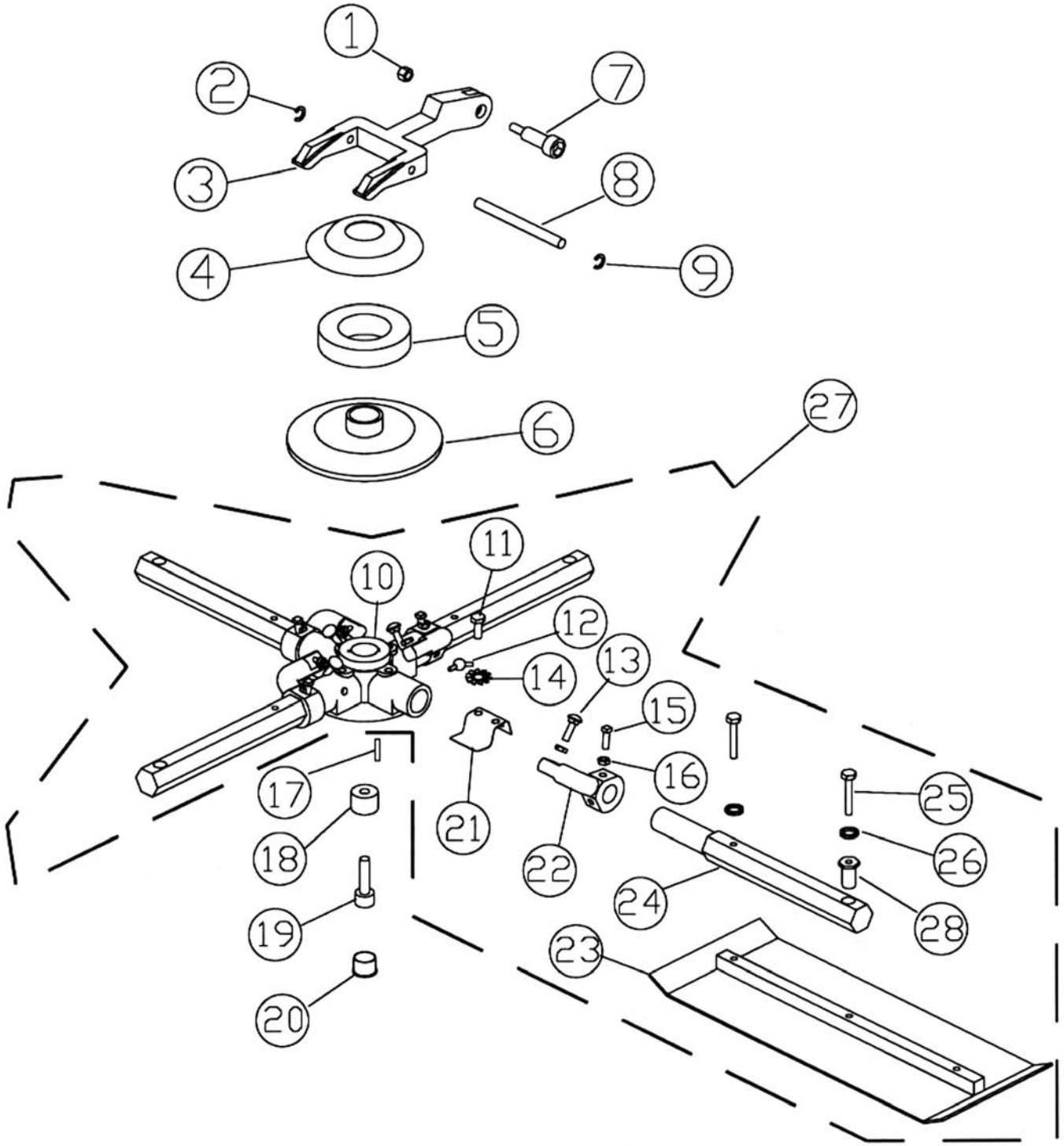

CONNECTS TO LEFT HAND WATER TANK
BOLTS TO REAR FRAME
ALLEN ENGINEERING
BRASS REDUCER
RED WIRE TO SPRAY SWITCH
BLACK WIRE TO PUMP MNT BOLT
TO FUSE PANEL

SPRAY SYSTEM ASSEMBLY (cont'd)

ILL.	PART #	DESCRIPTION	QTY.
1.	012705	CAP, BRASS CP1325	2
2.	012702	TIP, SPRAY #8001 (FINE)	2
3.	012706	STRAINER, 5053100SS	2
4.	012704	VALVE, SPRAY RELIEF	2
5.	111001	FITTING, FATIGUE	2
6.	013499	NIPPLE, 1/4 x 2	2
7.	026930	BRACKET, SPRAY NOZZLE RIGHT HAND	1
8.	026931	BRACKET, SPRAY NOZZLE LEFT HAND	1
9.	036937	TEE, 1/4 BRASS (KAWASAKI)	1
	036937	TEE, 1/4 BRASS (KOHLER - LINAMAR)	2
10.	010194	FITTING, MALE PUSHLOK (KAWASAKI)	8
	010194	FITTING, MALE (KOHLER/HONDA)	12
11.	013392	HOSE, PUSHLOK 3/8	As Req.
12.	013392	HOSE, PUSHLOK 3/8	As Req.
13.	013392	HOSE, PUSHLOK 3/8	As Req.
14.	033735	PUMP, F/ SPRAY SYSTEM	1
15.	013392	HOSE, PUSHLOK 3/8 (KAWASAKI)	As Req.
16.	037485	HARNESS WIRE F/ SPRAY SYSTEM	1
17.	037480	BOOT, TOGGLE	1
18.	037483	SWITCH MOUNT ASSEMBLY	1
19.	037681	CLAMP, WIRE F/ SPRAY SYSTEM	4
20.	036782	GAUGE, WATER SPRAY TANK	1
21.	039063	TANK, WATER W/O CAP (KAWASAKI ONLY)	1
	041640	TANK, FUEL & WATER (900 EDGER) *NOT SHOWN*	1
22.	034111	GASKET, F/ GAUGE	1
23.	034984	TANK, WATER (KOHLER/HONDA) (LINAMAR)	2
24.	013392	HOSE, PUSHLOCK 3/8 (KOHLER/HONDA) (LM)	As Req.
25.	013392	HOSE, PUSHLOCK 3/8 (KOHLER/HONDA) (LM)	As Req.
26.	013392	HOSE, PUSHLOCK 3/8 (KOHLER/HONDA) (LM)	As Req.
27.	035847	BRKT., WATER BOTTLE (KOHLER/HONDA)	2
	029571	BRKT., WATER BOTTLE (LINAMAR)	2
28.	039278B	CAP, BLUE WATER FILTER ASSY (KAWASAKI)	1
29.	013557	FTG, 3/8 X 1/4 BRASS HEX (REDUCER)	1
30.	037949	SPRAY SWITCH CLAMP CAP	4
31.	029575	BRKT, HOLD DOWN (KOHLER/HONDA)	2

NOTE: PARTS LISTED ABOVE WITH (KOHLER/HONDA) ARE PART OF THE MANUAL SPRAY KIT 026933.

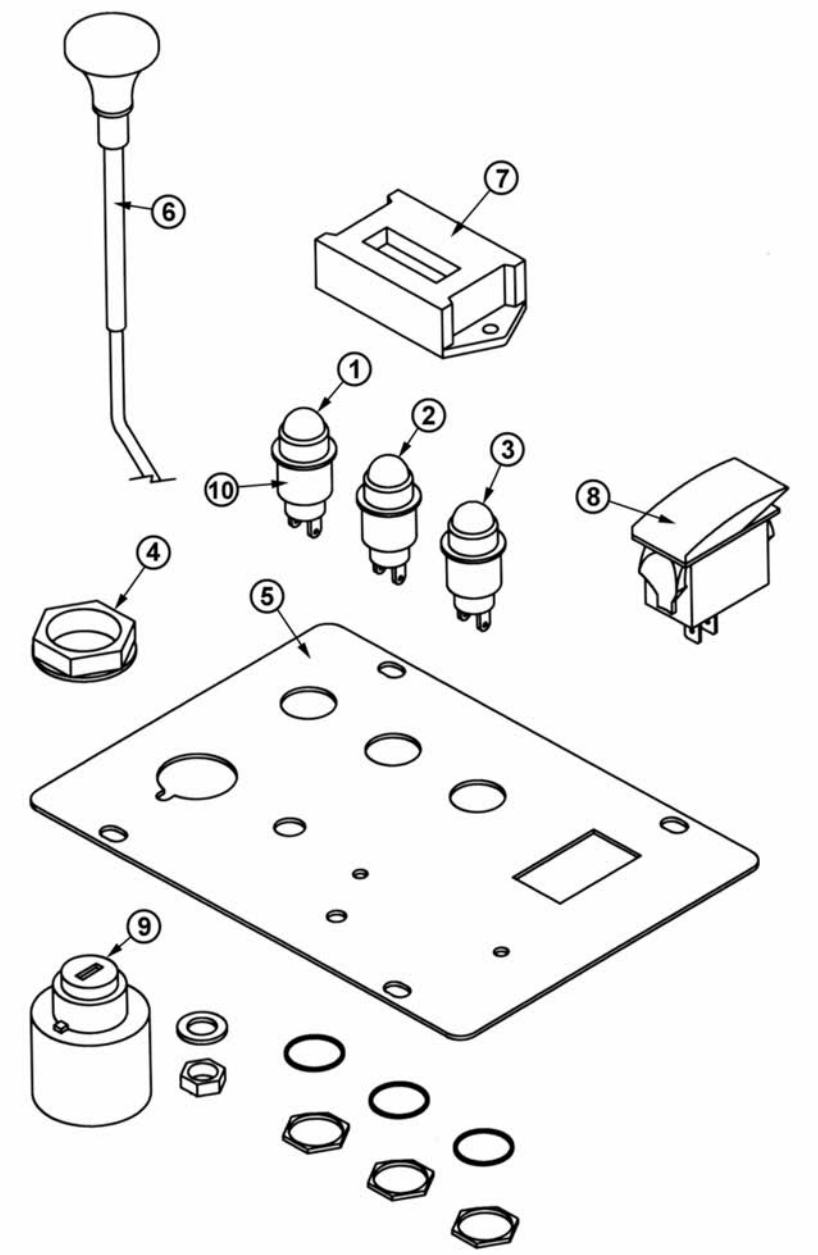
SPIDER ASSEMBLY



SPIDER ASSEMBLY (cont'd)

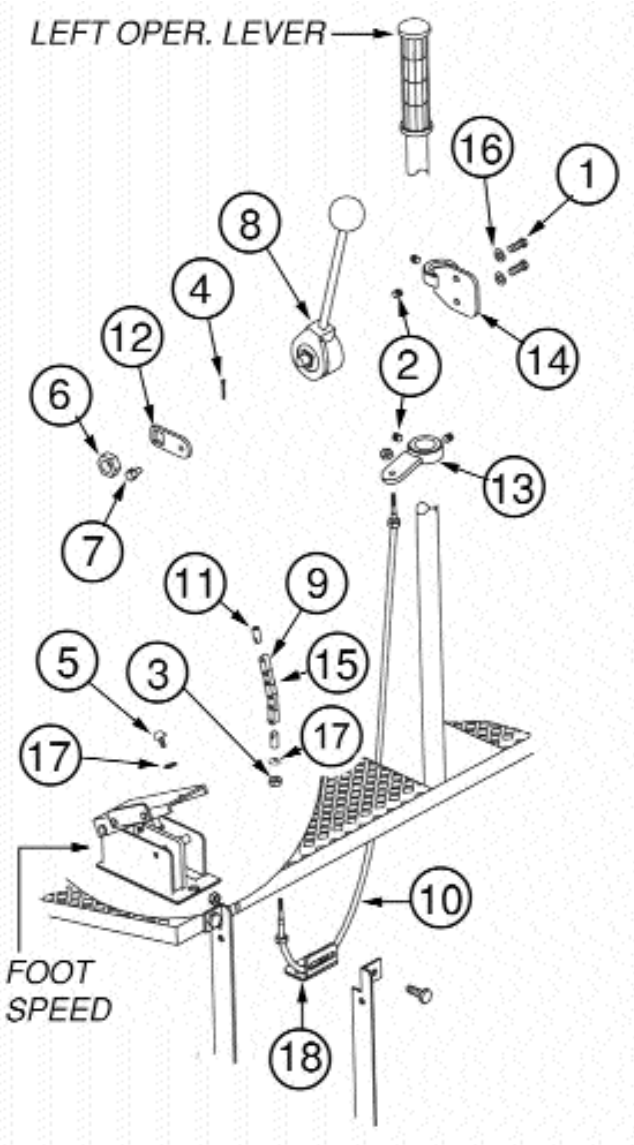
ILL.	PART #	DESCRIPTION	QTY.
1.	012612	NUT, HEX SELFLOCK 5/16-18	1
2.	015677	E-RING RETAINER	
3.	026215	ARM, YOKE	1
4.	015821	PRESSURE PLATE CAP	1
5.	015822	BEARING, THRUST	1
6.	015824	PLATE, PRESSURE	1
7.	026504	BOLT, SHOULDER 3/8 x 1-1/4 W/ 5/16-18 THDS	1
8.	015678	PIN, YOKE ARM RETAINER 7/16 x 7-3/8	1
9.	015677	E-RING RETAINER (SAME AS ILL.# 2)	
10.	020572	BOSS F/ SPIDER RIGHT HAND	1
	015816	BOSS F/ SPIDER LEFT HAND	1
11.	015683	SCREW, DOG CAP 3/8-16 x 7/8	4
12.	024755	GREASE FITTING 1/8-27 NPT 45^{o}	4
	015692	PLUG, PLASTIC CAP #GC-5 (NOT SHOWN)	4
13.	012990	BOLT, CARRIAGE 3/8-18 x 1-1/4	4
14.	015682	LOCK WASHER EXTERNAL STAR 3/8	4
15.	015686	SET SCREW SQ. HEAD 3/8-16 x 1	4
16.	015684	NUT, JAM 3/8-16	8
17.	026227	KEY, 3/8 x 1	1
18.	015690	WASHER RETAINING	1
19.	015691	SCREW, SOCKET HEAD 1/2-13 x 1 1/2 LH	1
	020155	SCREW, SOCKET HEAD 1/2-13 x 1 1/2 RH	1
20.	015693	PLUG, PLASTIC CAP EC-12	2
21.	016920	CLIP, SPRING UNIVERSAL	4
22.	033032	LEVER, LIFT UNIVERSAL STD	4
23.	015890	BLADE, 6 x 14 FINISH	4
24.	015818	ARM, SPIDER	4
25.	010024	BOLT, 5/16-18 x 2 GR. 5	12
26.	010090	LOCK WASHER 5/16	12
27.	024813	SPIDER ASSEMBLY F/ 1050 RIGHT HAND	1
	015893	SPIDER ASSEMBLY F/ 1050 LEFT HAND	1
28.	015688	SCREW 9/16-18 NF ADJUSTING / MAC	4

KAWASAKI CONTROL PANEL ASSEMBLY



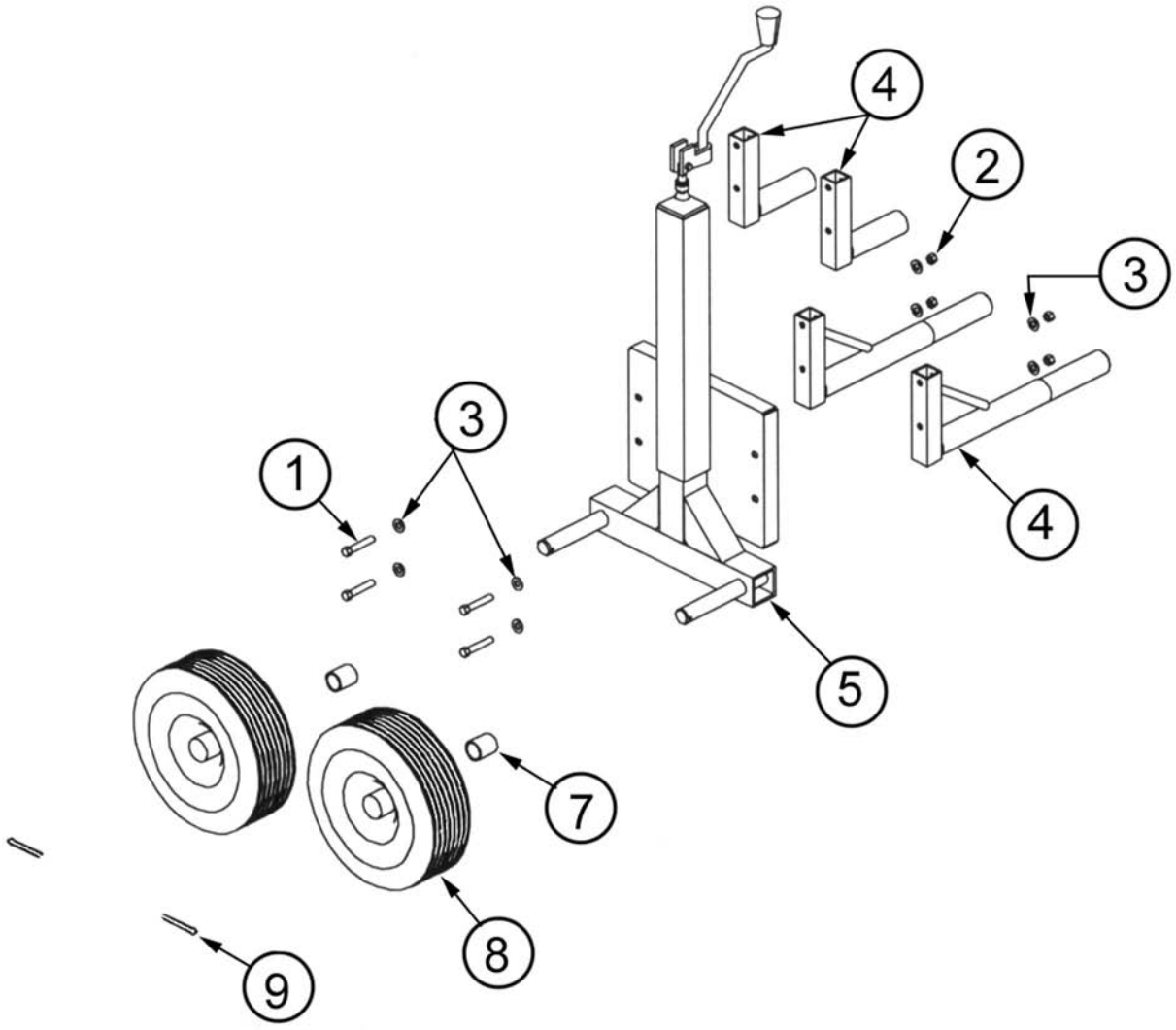
ILL.	PART#	DESCRIPTION	QTY.
1.	034613	LENS, GREEN	1
2.	034612	LENS, AMBER	1
3.	034614	LENS, RED	1
4.	27005-2055	KEY SWITCH	1
5.	035267	CONTROL PANEL	1
6.	029928	CHOKE CABLE	1
7.	042036	HOURMETER, SENDEC	1
8.	032125	SWITCH, ROCKER	1
9	27005-2055	KEY SWITCH (PART OF ILL.# 4)	1
10.	034610	FIXTURE, LIGHT	3
11.	034611	LIGHT (NOT SHOWN)	3
12.	034876	DECAL, “LIGHTS”	1
13.	034877	DECAL, “RUN, TEMP, OIL”	1

ACCESSORIES
CRUISE CONTROL KIT PART# 028848



ILL.	PART#	DESCRIPTION	QTY.
1.	010018	BOLT, 5/16-18 x 1/2	2
2.	010313	SET SCREW 5/16-18 x 3/8	4
3.	010570	NUT, HEX 10-32	1
4.	010972	PIN, COTTER 3/16 x 1-1/2	1
5.	010382	SCREW, 10-32 x 1	1
6.	020688	NUT, JAM 5/8-18 RH	1
7.	024984	PIVOT, FOOT SPEED CONTROL	1
8.	028018	LOCK, POSITIVE PITCH	1
9.	028035	LINK, MASTER #35	2
10.	028243	THROTTLE, HD CABLE ASSEMBLY	1
11.	028842	END, CRUISE CONTROL CHAIN	1
12.	028844	SIDE BRACKET, CRUISE CONTROL	1
13.	028846	BRACKET, CRUISE CONTROL CABLE	1
14.	028847	BRACKET, CRUISE CONTROL LEVER	1
15.	028881	CHAIN, CRUISE CONTROL	1
16.	032337	WASHER, STAR INTERNAL 5/16	2
17.	032358	WASHER, STAR 10-32	2
18.	032356	BRACKET, PEDAL END CRUISE CONTROL CABLE	1

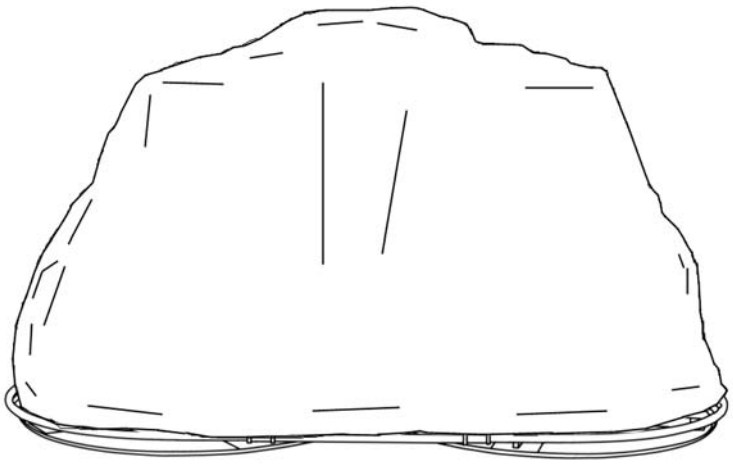
ACCESSORIES (cont'd)
DOLLY JACK SYSTEM -- SET PART # 027684



ILL.	PART#	DESCRIPTION	QTY.
1.	010040	BOLT, 3/8-16 x 2	8
2.	010464	NUT, NYLON LOCK 3/8-16	8
3.	017751	FLAT WASHER 3/8	16
4.	026729	DOLLY JACK MOUNTING TUBES (FRONT)	2
	026728	DOLLY JACK MOUNTING TUBES (REAR)	2
5.	026938	DOLLY JACK	2
7.	024628	WHEEL SPACER	8
8.	099014	TIRES	4
9.	013759	PIN, COTTER 3/16 x 2-1/2	8
10.	026899	DOLLY JACK, FRONT ASSEMBLY	1
11.	026900	DOLLY JACK, REAR ASSEMBLY	1

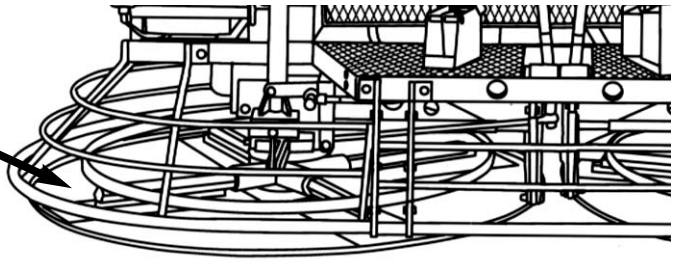
RIDING TROWEL VINYL COVER

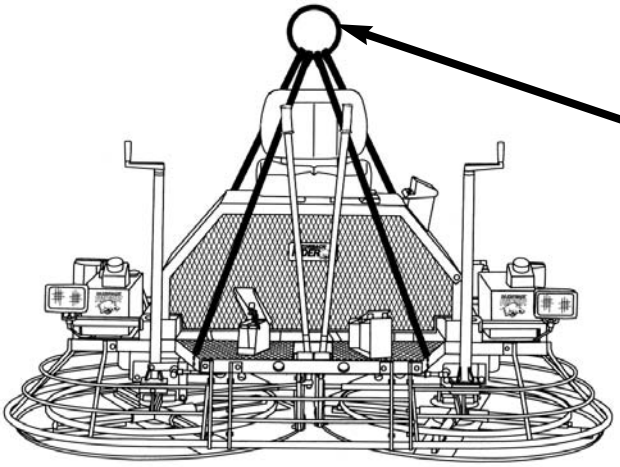
PART #: 026594



FLOATING DISCS (PANS)

PART #: 026910-2



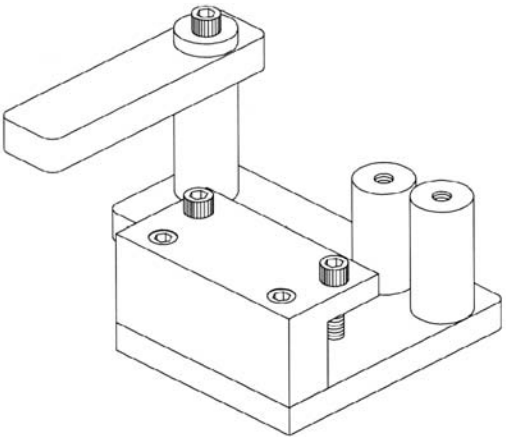


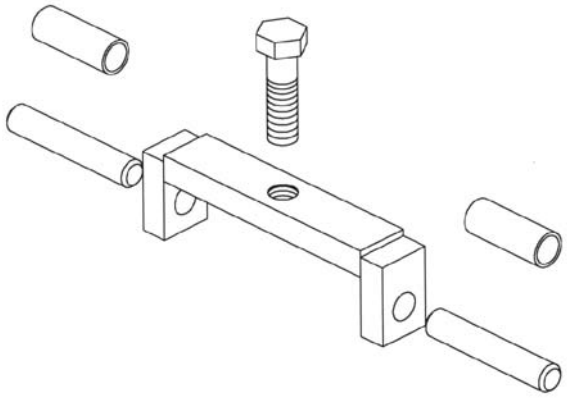
LIFTING BRIDLE (SLING TYPE)

PART #: 035461

TROWEL ARM ALIGNMENT JIG

PART #: 016863





SPIDER PULLER ASSEMBLY

PART #: 035688

LIMITED WARRANTY

Allen Engineering Corporation warrants its products to be free of defects in material or workmanship for the following periods:

A. All New Machines and Part	**6 Months**
B. All New Gear Boxes	**2 Years**
C. All Factory Reconditioned Gear Boxes	**1 Year**

Warranty period begins on first day of use by End User. This first day of use is established by a completed warranty card or a Bill of Sale to the end user. All warranty is based on the following limited warranty terms and conditions.

1. Allen Engineering Corporation's obligation and liability under this warranty is limited to repairing or replacing parts if, after Allen's inspection, it is determined to be a defect in material or workmanship. Allen Engineering Corporation reserves the choice to repair or replace.
2. If Allen Engineering Corporation chooses to replace the part, it will be at no cost to the customer and will be made available to the Distributor/Dealer from whom the customer purchased the product.
3. Replacement or repair parts, installed in the product, are warranted only for the remainder of warranty period of the product as though they were the original parts.
4. Allen Engineering Corporation's warranty applies only to the products that are manufactured by Allen Engineering and does not cover component parts such as engines and clutches. Allen Engineering Corporation DOES NOT warranty clutches. Engine warranty claims should be made directly to an authorized factory service center for the particular engine make.
5. Allen Engineering Corporation's warranty does not cover the normal maintenance of products or its components (such as engine tune-ups and oil changes). The warranty also does not cover normal wear and tear items (such as belts and consumables).
6. Allen Engineering Corporation's warranty will be void if it is determined that the defect resulted from operator abuse, failure to perform normal maintenance on the product, modification to product, alterations or repairs made to the product without the written approval of Allen Engineering Corporation. Allen Engineering Corporation specifically excludes from warranty any damage to any trowels resulting from an impact to the rotors. Allen Engineering Corporation also excludes from warranty any failure of clutches on any engine driven piece of equipment.
7. If a new gear box has a factory defect within the first year of use, Allen Engineering Corporation will either repair the gear box or replace it with a new gear box. If a new gearbox has a factory defect in the second year of use, Allen Engineering Corporation will either repair it or replace it with a factory reconditioned gear box. Impact damage is NOT covered under the gear box warranty.
8. Allen Engineering Corporation will pay shop labor repair on warranty at the Allen Engineering Shop Labor Rate in existence on the date of the warranty claim. An Allen Engineering Labor Chart will determine the time allowed to complete a repair and will govern the shop labor hours that will be allowed.
9. Allen Engineering Corporation will pay freight on warranty replacement parts at Worldwide standard ground rates. No warranty replacement parts will be shipped air freight at the expense of Allen Engineering Corporation. Allen Engineering only pays outbound freight charges when sending warranty replacement parts to the customer VIA ground service. Allen Engineering does not pay any inbound freight, however, if Allen Engineering determines this to be warranty defect only then will Allen Engineering reimburse the customer for inbound freight at standard ground rates.
10. Allen Engineering Corporation's warranty policy WILL NOT COVER the following; taxes, shop supplies, environmental surcharges, air freight, travel time, loss of rental revenue, or any other charges whatsoever or any liabilities for direct, incidental, or consequential damage or delay.
11. **Allen Engineering Corporation makes no other warranty, expressed or implied. This limited warranty is in lieu of the warranty of merchantability and fitness. There are no other warranties that extend beyond the description on this document.**
12. No Allen Engineering Corporation employee or representative is authorized to change this warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of Allen Engineering Corporation.